

POWERING YOUR LIFE

**Web :** [www.deyeess.com](http://www.deyeess.com)

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**Note :** The technical data mentioned may be updated or revised due to product development.The data in this brochure is subject to change without notice.The latest datasheet and catalog can be acquired via [sales@deye.com.cn](mailto:sales@deye.com.cn)

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DEYE ENERGY STORAGE  
PRODUCT CATALOG  
(GLOBAL)



Stock Code: 605117.SH



WORLD LEADING

ENERGY STORAGE SYSTEM  
SOLUTIONS PROVIDER

# 01

## COMPANY PROFILE



## LEADING PROVIDER OF ENERGY STORAGE SYSTEM SOLUTIONS

### DEYE TECHNOLOGY CO., LTD.

Deye Technology Co., Ltd. is a comprehensive tech manufacturing enterprise, integrating R&D, design, production, sales, and service. It operates modern intelligent production facilities in Ningbo, Jiaxing, and other locations, spanning over 1000,000 square meters with complete production and testing equipment. Listed on the Shanghai Stock Exchange in April 2021.

1000000 m<sup>2</sup>

Total Area

10000 +

Employees

2021

Listed on SSE

# 4

### CORE INDUSTRY CHAINS



High-Efficiency Inverter Solution



All-Scenario Humidity Solution



Solar HVAC Solution



Smart Energy Storage Solution

# DEVELOPMENT HISTORY



**2023**

## Intelligent Energy

Deye established Deye Cloud and energy storage R&D center in Shanghai.

**2020**

## Energy Storage

Deye has been offering low-voltage, high-voltage batteries, and All-in-One ESS that work seamlessly with Deye's storage inverters.

**2007**

## Heat-exchange Field

Expanded into heat-exchange technologies and became a key supplier to Midea.

**2025**

## USD 1.4B New Energy Milestone

The new energy business surpassed USD 1.4 billion in revenue.

**2024**

## Group Revenue Hits 1.5B USD

Diversified in inverters and energy storage, leading the global market share.

**2021**

## Listed on SSE

In April, Deye listed on the main board of the Shanghai Stock Exchange.

**2016**

## Photovoltaic Inverter

Deye's residential and C&I inverters have been rapidly evolving to provide customized solutions.

**2000**

## Environmental Appliances

Deye's dehumidifiers have been leading sales on Tmall and JD.com for years.

**1990**

## Mold Injection

Deye originated in manufacturing injection molded parts, molds, and sheet metal.

# OUR FACTORY

**50B** Annual Planned Output  
Before 2030

## Ningbo Beilun Headquarters

130,000 sqm



## Ningbo Cixi Longshan Base

180,000 sqm



## Shanghai Innovation Center

7,000 sqm



## Haiyan Base

200,000 sqm



## Ningbo Cixi Latest Base

179,195 sqm



## Ningbo Beilun 246 Base

100,000 sqm



## Ningbo Beilun 246 Phase II Base

40,713 sqm



## Malaysia Johor Base

133,546 sqm

# ULTIMATE SAFETY

LEADING PROVIDER OF ENERGY STORAGE  
SYSTEM SOLUTIONS



# CONTINUOUS INNOVATION

Deye is committed to continuous innovation with significant R&D capabilities in Shanghai and Ningbo, employing over 500 top-tier researchers and thousands of technical staff.



**6GWH+**

Capacity 2025



**180,000+**

Sqm



**600,000+**

Packs Capacity



**300+**

R&D Engineers

# GLOBAL CERTIFICATIONS

Ensure compliance with regional standards



# GLOBAL LAYOUT





**23**  
Overseas Service  
Centers



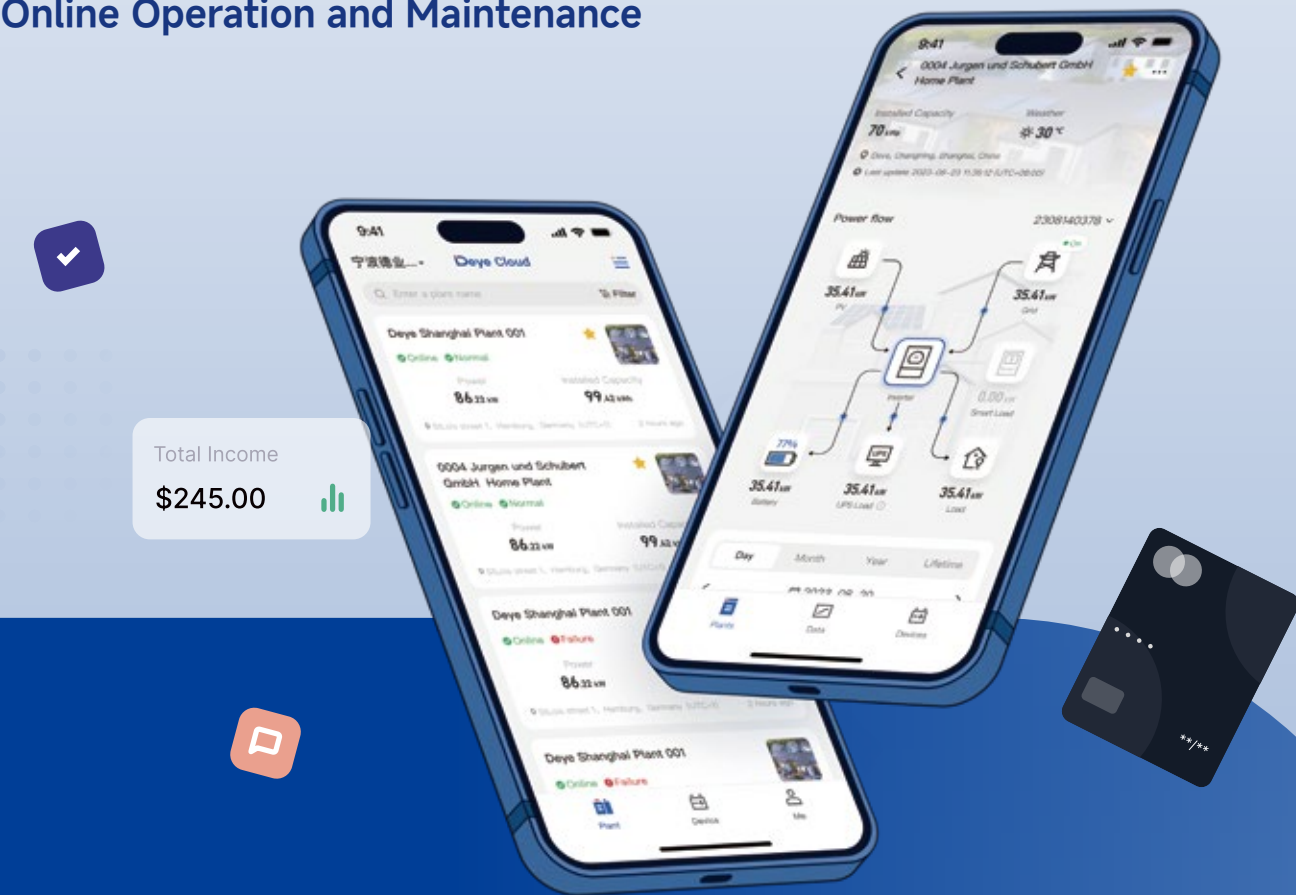
**160+**  
Countries



**7M+**  
Equipment in  
Operation

# DEYE CLOUD

## Cloud Management: Online Operation and Maintenance



- FW Update
- APP & Web
- Alert Notifications
- Localized Data Centers
- AI Assistant

**Deye Cloud** is an advanced platform specifically designed for Deye Inverter and ESS, providing users with an outstanding online experience.

Through Deye Cloud, users can easily connect their photovoltaic or energy storage systems to the internet, supporting real-time monitoring of electricity usage and load conditions, cloud-based parameter adjustment, and online firmware updates.

With smart load settings based on time and battery SOC, it is possible to achieve home automation based on energy management.

It supports time-of-use or integration with dynamic pricing to achieve the lowest possible electricity costs.

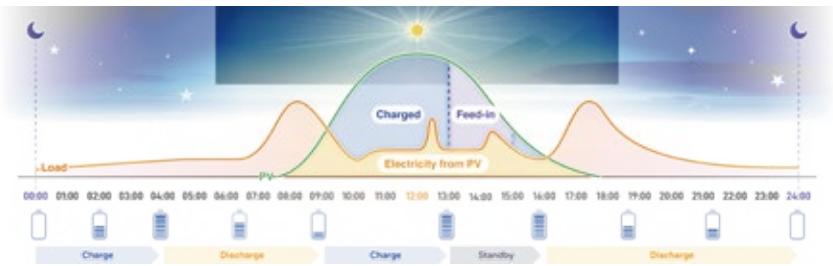
Deye Cloud utilizes two localized data centers in Europe and America to ensure data independence and security.

## Customizable Charging and Discharging Function

The inverter can be programmed with 6 different charging and discharging time slots to make the most of time-of-use electricity pricing and reduce costs.

Through the **Deye Copilot** feature in the Deye Cloud, the system can also access local dynamic electricity prices, enabling AI to make decisions on selling or buying electricity (available in select regions).

### Self Consumption - conservative

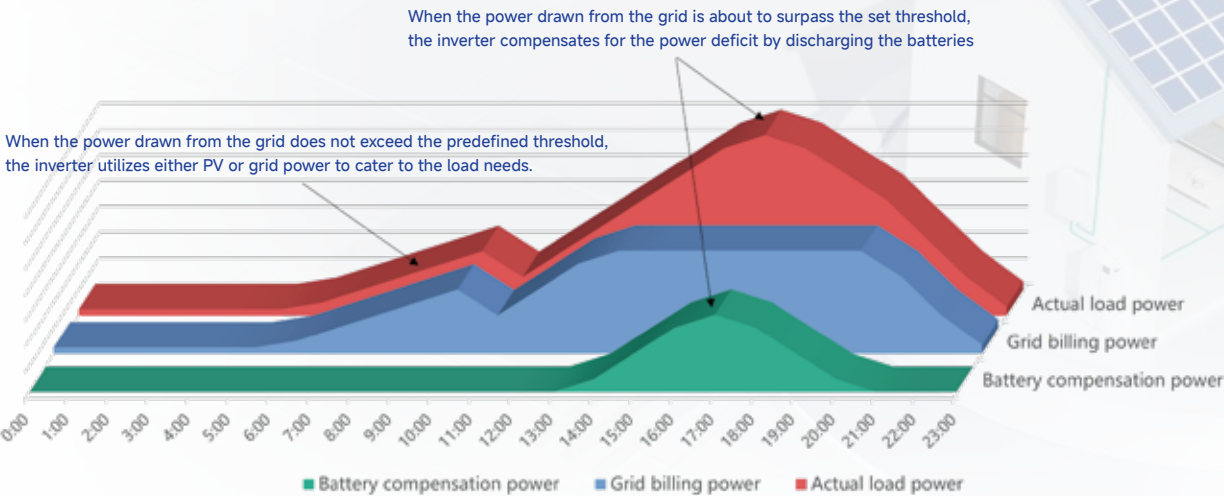


### Maximum Earning - radical

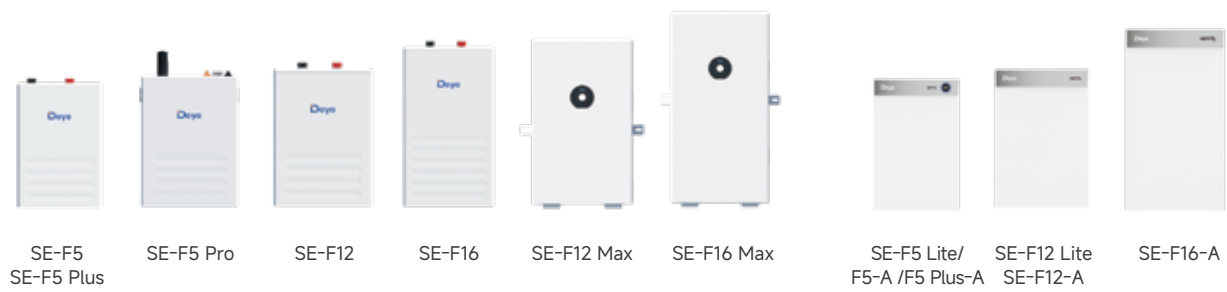
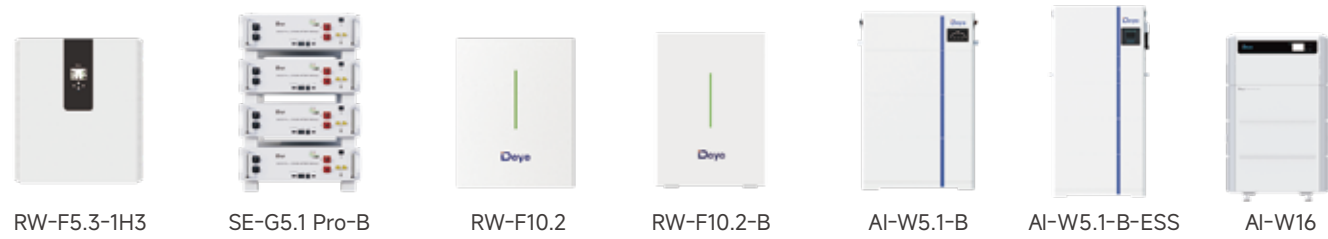


## Grid Peak Shaving Function

Grid peak shaving, when the power drawn from the grid approaches the set limit, the battery discharges to supplement part of the power, preventing high-rate electricity usage and reducing costs.



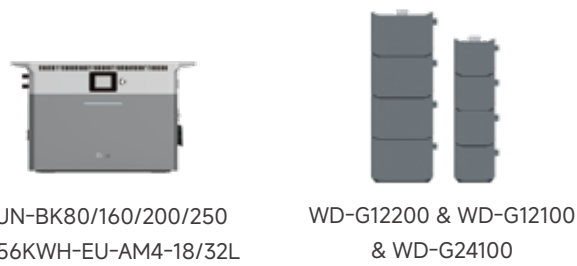
# Spring Series /



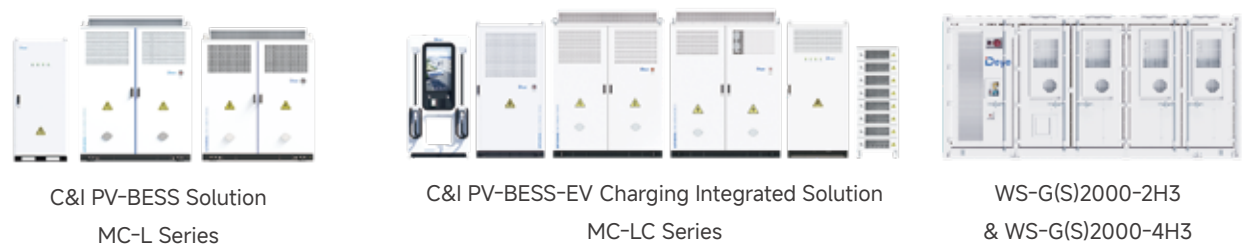
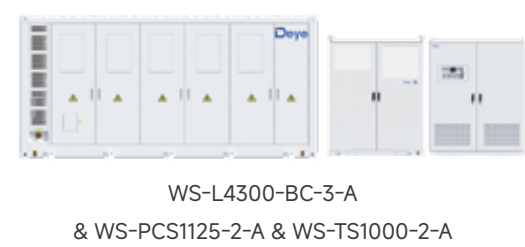
# Summer Series /



# Autumn Series /



# Winter Series /



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# SPRING

Series

## Residential ESS Solution

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Spring Series  
Residential ESS Solution

Wall-Mounted Battery(LV)

NEPT F



Comprehensive Protection

- Advanced BMS with active fuse

Optimized Energy Density

- Integrated PACK: reduced line loss, enhanced energy density

Easy Maintenance

- Auto-networking, Local monitoring mode for battery, remote monitoring mode for ESS

Superior Performance

- Support Max. 1C charge & 1.2C discharge (SE-F5 & F5 Plus), GaN MOSFETs: 50% loss reduction, high-temp resistance

Flexible Expansion

- Max. 32 units in parallel

Reliable Durability

- Operates reliably in -20°C to 55 °C, natural cooling

SE-F5 & SE-F5 Plus (AS, AF, LATAM)  
SE-F5 Pro (Global)

Technical Data

| Main Parameters                  |                 |                         |                     |
|----------------------------------|-----------------|-------------------------|---------------------|
|                                  |                 | SE-F5                   | SE-F5 PlusSE-F5 Pro |
| Battery Chemistry                |                 | LiFePO <sub>4</sub>     |                     |
| Capacity                         |                 | 100 Ah                  |                     |
| Scalability <sup>[1]</sup>       |                 | Max. 32 pcs in parallel |                     |
| Nominal Voltage                  |                 | 51.2 V                  |                     |
| Operating Voltage                |                 | 44.8 V ~ 57.6 V         |                     |
| Nominal Energy                   |                 | 5.12 kWh                |                     |
| Charge Current <sup>[2]</sup>    | Recommend       | 50 A                    | 50 A                |
|                                  | Max. Continuous | 100 A                   | 100 A               |
|                                  | Peak            | 120 A ( 10 sec )        | 150 A ( 120 sec )   |
| Discharge Current <sup>[2]</sup> | Recommend       | 50 A                    | 50 A                |
|                                  | Max. Continuous | 120 A                   | 100 A               |
|                                  | Peak            | 150 A ( 10 sec )        | 150 A ( 120 sec )   |

| Other Parameters                                         |                                            |                                        |                                                      |
|----------------------------------------------------------|--------------------------------------------|----------------------------------------|------------------------------------------------------|
| Model                                                    | SE-F5                                      | SE-F5 Plus                             | SE-F5 Pro                                            |
| Recommend Depth of Discharge                             | 80% DoD                                    | 90% DoD                                | 100% DoD                                             |
| Dimension ( W × D × H, mm )<br>( Without hanging board ) | 370 × 548 × 140                            | 370 × 548 × 140                        | 404 × 547 × 141                                      |
| Weight Approximate                                       | 41 kg                                      | 41 kg                                  | 44 kg                                                |
| LED Indicator                                            | LED ( SOC, working, protecting ) & Buzzer  |                                        |                                                      |
| IP Rating of Enclosure                                   | IP21                                       |                                        |                                                      |
| Operating Temperature                                    | Charge: 0~55°C / Discharge: -20~55°C       | Charge: -10~55°C / Discharge: -20~55°C | Charge: 0~55°C / Discharge: -20~55°C                 |
| Storage Temperature                                      | 0~35°C                                     |                                        |                                                      |
| Relative Humidity                                        | 95% (non-condensing)                       |                                        |                                                      |
| Altitude                                                 | ≤3000m                                     |                                        |                                                      |
| Cycle Life                                               | ≥6000(25°C±2°C,70%EOL)                     |                                        |                                                      |
| Installation                                             | Wall-Mounted, Floor-Mounted, Stack-Mounted |                                        |                                                      |
| Communication                                            | CAN2.0, RS485, Bluetooth+APP               |                                        | CAN2.0, RS485, Optional module, (WiFi+Bluetooth+APP) |
| Warranty Period <sup>[3]</sup>                           | 5 years                                    | 5 Years / 10 Years <sup>[4]</sup>      |                                                      |
| Energy Throughput <sup>[3]</sup>                         | 8 MWh                                      | 16 MWh                                 |                                                      |
| Certification                                            | UN38.3, MSDS, CE, CB                       |                                        | UN38.3, MSDS, CE, CB, VDE2510-50                     |

[1] Max. 64 pcs can parallel with CAN-Bridge.  
[2] Operating current is affected by temperature and SOC.  
[3] Conditions apply, refer to Deye Warranty Letter.  
[4] The warranty period depends on the final installation site of the battery system. For more information, please refer to the warranty policy.

SE-F12 & SE-F16 (EU, AS, AF, LATAM)  
SE-F12 Max (EU, AU) & SE-F16 Max (AU)

Technical Data

| Main Parameters                  |                 |                         |            |                     |
|----------------------------------|-----------------|-------------------------|------------|---------------------|
|                                  |                 | SE-F12                  | SE-F12 Max | SE-F16 / SE-F16 Max |
| Battery Chemistry                |                 | LiFePO <sub>4</sub>     |            |                     |
| Capacity                         |                 | 235 Ah                  |            | 314 Ah              |
| Scalability <sup>[1]</sup>       |                 | Max. 32 pcs in parallel |            |                     |
| Nominal Voltage                  |                 | 51.2 V                  |            |                     |
| Operating Voltage                |                 | 44.8 V ~ 57.6 V         |            |                     |
| Nominal Energy                   |                 | 12.03 kWh               |            | 16 kWh              |
| Charge Current <sup>[2]</sup>    | Recommend       | 115 A                   |            | 157 A               |
|                                  | Max. Continuous | 230 A                   |            | 160 A               |
|                                  | Peak            | 280 A ( 10 sec )        |            |                     |
| Discharge Current <sup>[2]</sup> | Recommend       | 115 A                   |            | 157 A               |
|                                  | Max. Continuous | 230 A                   |            |                     |
|                                  | Peak            | 280 A ( 10 sec )        |            |                     |

| Other Parameters                                         |                                                                  |                              |                                           |                                |
|----------------------------------------------------------|------------------------------------------------------------------|------------------------------|-------------------------------------------|--------------------------------|
| Model                                                    | SE-F12                                                           | SE-F12 Max                   | SE-F16                                    | SE-F16 Max                     |
| Recommend Depth of Discharge                             | 90% DoD                                                          | 95% DoD                      | 90% DoD                                   | 100% DoD                       |
| Dimension ( W × D × H, mm )<br>( Without hanging board ) | 400 × 559 × 233                                                  | 464 × 767 × 244.5            | 400 × 708 × 233                           | 464 × 914 × 244.5              |
| Weight Approximate                                       | 84 kg                                                            | 93 kg                        | 109 kg                                    | 118 kg                         |
| LED Indicator                                            | LED ( SOC, working, protecting ) & Buzzer                        | LCD(SOC, Alarm)              | LED ( SOC, working, protecting ) & Buzzer | LCD(SOC, Alarm), LED (Working) |
| IP Rating of Enclosure                                   | IP21                                                             | IP65                         | IP21                                      | IP65                           |
| Operating Temperature                                    | Charge: 0~55°C ( -20~55°C, 12 Max/16 Max with Optional heating ) |                              |                                           | Discharge: -20~55°C            |
| Storage Temperature                                      | 0°C~35°C                                                         |                              |                                           |                                |
| Relative Humidity                                        | 95% (non-condensing)                                             |                              |                                           |                                |
| Altitude                                                 | ≤3000m                                                           |                              |                                           |                                |
| Cycle Life                                               | ≥6000(25°C±2°C ,70%EOL)                                          |                              |                                           | ≥8000 (25°C±2°C, 70%EOL)       |
| Installation                                             | Wall-Mounted, Floor-Mounted, Stack-Mounted                       |                              |                                           |                                |
| Communication                                            | CAN2.0, RS485, Bluetooth+APP                                     | CAN2.0, RS485, Bluetooth+APP | CAN2.0, RS485, Bluetooth+APP              | CAN2.0, RS485, Bluetooth+APP   |
| Warranty Period <sup>[3]</sup>                           | 5 Years / 10 Years <sup>[4]</sup>                                | 10 years                     | 5 Years / 10 Years <sup>[4]</sup>         | 10 years                       |
| Energy Throughput <sup>[3]</sup>                         | 37 MWh                                                           | 37 MWh                       | 50 MWh                                    | 50 MWh                         |
| Certification                                            | UN38.3, CE, CB                                                   | UN38.3, CE, CB               | UN38.3, CE, CB                            | UN38.3, CE, CB                 |

[1] Max. 64 pcs can parallel with CAN-Bridge.  
[2] Operating current is affected by temperature and SOC.  
[3] Conditions apply, refer to Deye Warranty Letter.  
[4] The warranty period depends on the final installation site of the battery system. For more information, please refer to the warranty policy.

| Product Comparison |                        |                         |      |          |                      |
|--------------------|------------------------|-------------------------|------|----------|----------------------|
| Model              | Nominal Energy         | Charge / Discharge Rate | DoD  | Warranty | Size                 |
| SE-F5              | 5.12kWh, 51.2V, 100Ah  | 1C/1.2C                 | 80%  | 5years   | 370 x 548 x 140 mm   |
| SE-F5 Plus         | 5.12kWh, 51.2V, 100Ah  | 1C/1.2C                 | 90%  | 10years  | 370 x 548 x 140 mm   |
| SE-F5 Pro          | 5.12kWh, 51.2V, 100Ah  | 1C/1C                   | 100% | 10years  | 404 × 547 × 141 mm   |
| SE-F12             | 12.03kWh, 51.2V, 235Ah | 1C/1C                   | 90%  | 10years  | 400 x 583 x 233 mm   |
| SE-F12 Max         | 12.03kWh, 51.2V, 235Ah | 1C/1C                   | 95%  | 10years  | 464 × 767 × 244.5 mm |
| SE-F16             | 16kWh, 51.2V, 314Ah    | 0.5C/0.7C               | 90%  | 10years  | 400 x 708 x 233 mm   |
| SE-F16 Max         | 16kWh, 51.2V, 314Ah    | 0.5C/0.7C               | 100% | 10years  | 464 x 914 × 244.5 mm |

SE-F Series Model Selection and Appearance Reference

Common version

LED strip version

Display screen version

| Model                                        | Config Version | Reference                                                                             |
|----------------------------------------------|----------------|---------------------------------------------------------------------------------------|
| SE-F5/F5 Plus/F5 Pro/F12/F16                 | L              |  |
| SE-F5/F5 Plus/F5 Pro/F12/F16                 | E              |  |
| SE-F5/F5 Plus/F5 Pro/F12/F16/F12 Max/F16 Max | C              |  |

Spring Series  
Residential ESS Solution

Wall-Mounted Battery(LV)

NEW NEPT S



- SE-F5 Lite
- SE-F5-A
- SE-F5 Plus-A
- SE-F12 Lite
- SE-F12-A
- SE-F16-A



Comprehensive Protection

- Advanced BMS with active fuse



Optimized Energy Density

- Integrated PACK: reduced line loss, enhanced energy density



Easy Maintenance

- Auto-networking, Local monitoring mode for battery, remote monitoring mode for ESS



Superior Performance

- Support Max. 1C charge & discharge(SE-F5-A&SE-F5 Plus-A), GAN MOSFETs: 50% loss reduction, high-temp resistance



Flexible Expansion

- Max. 32 units in parallel



Reliable Durability

- Operates reliably in -20°C to 55°C, natural cooling

SE-F5 Lite & SE-F5-A & SE-F5 Plus-A  
(EU, AS, AF, LATAM)

Technical Data

Main Parameters

|                                  |                 | SE-F5 Lite              | SE-F5-A          | SE-F5 Plus-A |
|----------------------------------|-----------------|-------------------------|------------------|--------------|
| Battery Chemistry                |                 | LiFePO <sub>4</sub>     |                  |              |
| Capacity                         |                 | 100 Ah                  |                  |              |
| Scalability <sup>[1]</sup>       |                 | Max. 32 pcs in parallel |                  |              |
| Nominal Voltage                  |                 | 51.2 V                  |                  |              |
| Operating Voltage                |                 | 44.8 V ~ 57.6 V         |                  |              |
| Nominal Energy                   |                 | 5.12 kWh                |                  |              |
| Charge Current <sup>[2]</sup>    | Recommend       | 33 A                    | 50 A             |              |
|                                  | Max. Continuous | 50 A                    | 100 A            |              |
|                                  | Peak            | 60 A ( 10sec )          | 120 A ( 10 sec ) |              |
| Discharge Current <sup>[2]</sup> | Recommend       | 33 A                    | 50 A             |              |
|                                  | Max. Continuous | 60 A                    | 100 A            |              |
|                                  | Peak            | 72 A ( 10 sec )         | 120 A ( 10 sec ) |              |

Other Parameters

| Model                                                    | SE-F5 Lite                                 | SE-F5-A | SE-F5 Plus-A                       |
|----------------------------------------------------------|--------------------------------------------|---------|------------------------------------|
| Recommend Depth of Discharge                             | 80% DoD                                    |         | 100% DoD                           |
| Dimension ( W × D × H, mm )<br>( Without hanging board ) | 360 x 545 x 142.5                          |         |                                    |
| Weight Approximate                                       | 41 kg                                      |         |                                    |
| LED Indicator                                            | LED ( SOC, working, protecting ) & Buzzer  |         |                                    |
| IP Rating of Enclosure                                   | IP21                                       |         |                                    |
| Operating Temperature                                    | Charge:0~55°C/Discharge:-20~55°C           |         | Charge:-10~55°C/Discharge:-20~55°C |
| Storage Temperature                                      | 0~35°C                                     |         |                                    |
| Relative Humidity                                        | 95% (non-condensing)                       |         |                                    |
| Altitude                                                 | ≤3000m                                     |         |                                    |
| Cycle Life                                               | ≥6000(25°C±2°C,70%EOL)                     |         |                                    |
| Installation                                             | Wall-Mounted, Floor-Mounted, Stack-Mounted |         |                                    |
| Communication                                            | CAN2.0, RS485, Bluetooth+APP               |         |                                    |
| Warranty Period <sup>[3]</sup>                           | 5 years                                    |         | 5 Years / 10 Years <sup>[4]</sup>  |
| Energy Throughput <sup>[3]</sup>                         | 8 MWh                                      |         | 16 MWh                             |
| Certification                                            | UN38.3, CE, CB                             |         |                                    |

[1] Max. 64 pcs can parallel with CAN-Bridge.

[2] Operating current is affected by temperature and SOC.

[3] Conditions apply, refer to Deye Warranty Letter.

[4] The warranty period depends on the final installation site of the battery system. For more information, please refer to the warranty policy.

# SE-F12 Lite & SE-F12-A & SE-F16-A

## (EU, AS, AF, LATAM)

### Technical Data

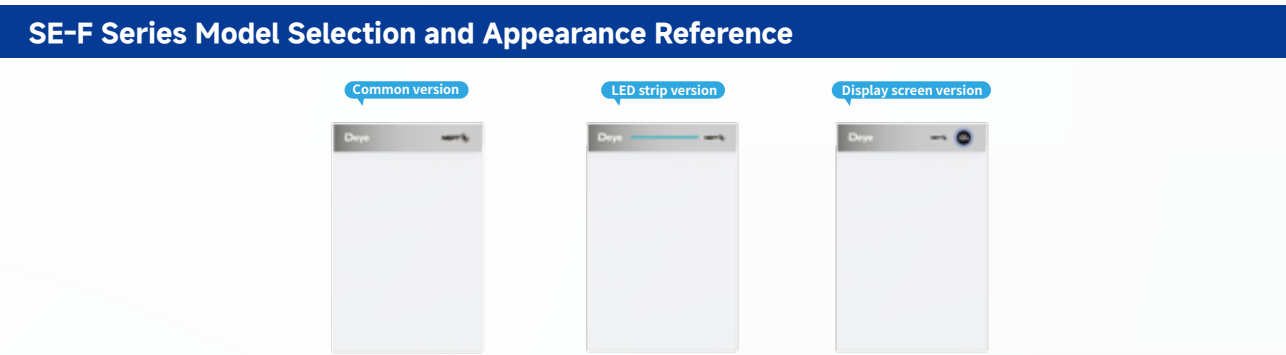
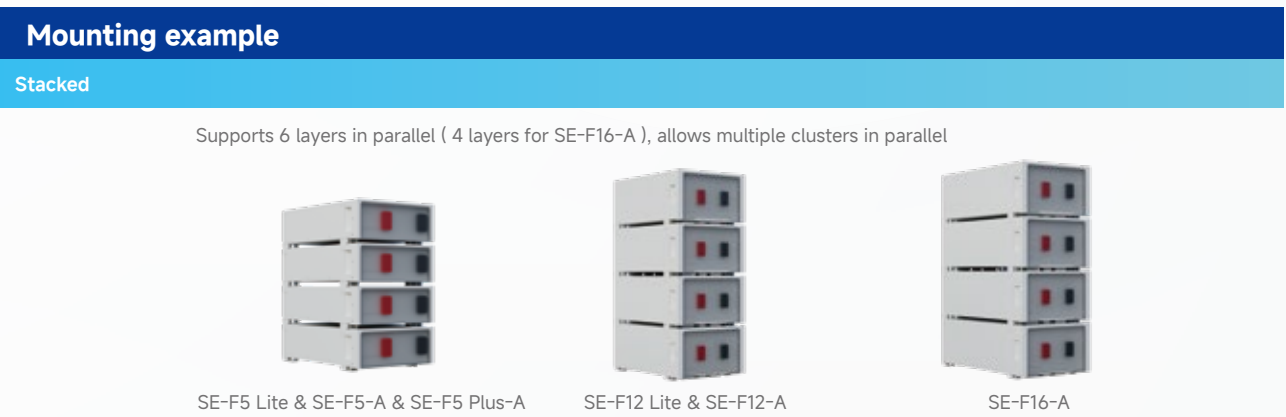
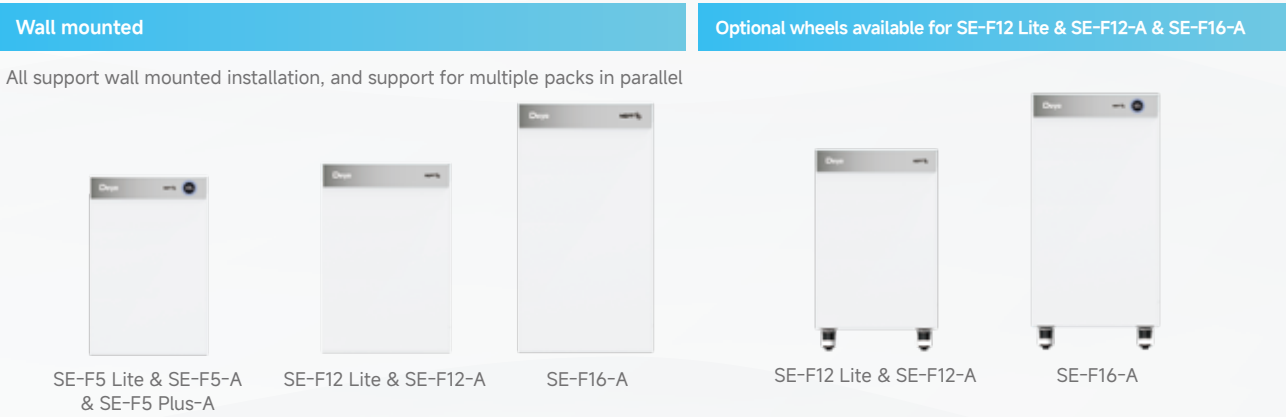
| Main Parameters                  |                 |                         |                  |                  |
|----------------------------------|-----------------|-------------------------|------------------|------------------|
|                                  |                 | SE-F12 Lite             | SE-F12-A         | SE-F16-A         |
| Battery Chemistry                |                 | LiFePO <sub>4</sub>     |                  |                  |
| Capacity                         |                 | 235 Ah                  | 235 Ah           | 314 Ah           |
| Scalability <sup>[1]</sup>       |                 | Max. 32 pcs in parallel |                  |                  |
| Nominal Voltage                  |                 | 51.2 V                  |                  |                  |
| Operating Voltage                |                 | 44.8 V ~ 57.6 V         |                  |                  |
| Nominal Energy                   |                 | 12.03 kWh               | 12.03 kWh        | 16 kWh           |
| Charge Current <sup>[2]</sup>    | Recommend       | 75 A                    | 115 A            | 95 A             |
|                                  | Max. Continuous | 120 A                   | 230 A            | 160 A            |
|                                  | Peak            | 180 A ( 10sec )         | 280 A ( 10sec )  | 280 A ( 10sec )  |
| Discharge Current <sup>[2]</sup> | Recommend       | 75 A                    | 115 A            | 157 A            |
|                                  | Max. Continuous | 140 A                   | 230 A            | 230 A            |
|                                  | Peak            | 210 A ( 10 sec )        | 280 A ( 10 sec ) | 280 A ( 10 sec ) |

| Other Parameters                                         |                                            |          |                         |
|----------------------------------------------------------|--------------------------------------------|----------|-------------------------|
| Model                                                    | SE-F12 Lite                                | SE-F12-A | SE-F16-A                |
| Recommend Depth of Discharge                             | 95% DoD                                    |          | 100% DoD                |
| Dimension ( W × D × H, mm )<br>( Without hanging board ) | 400 x 594 x 233                            |          | 400 x 737 x 233         |
| Weight Approximate                                       | 84 kg                                      |          | 109 kg                  |
| LED Indicator                                            | LED ( SOC, working, protecting ) & Buzzer  |          |                         |
| IP Rating of Enclosure                                   | IP21                                       |          |                         |
| Operating Temperature                                    | Charge :0~55°C/Discharge: -20~55°C         |          |                         |
| Storage Temperature                                      | 0~35°C                                     |          |                         |
| Relative Humidity                                        | 95% (non-condensing)                       |          |                         |
| Altitude                                                 | ≤3000m                                     |          |                         |
| Cycle Life                                               | ≥6000(25°C±2°C,70%EOL)                     |          | ≥8000(25°C±2°C ,70%EOL) |
| Installation                                             | Wall-Mounted, Floor-Mounted, Stack-Mounted |          |                         |
| Communication                                            | CAN2.0, RS485, Bluetooth+APP               |          |                         |
| Warranty Period <sup>[3]</sup>                           | 5 Years / 10 Years <sup>[4]</sup>          |          |                         |
| Energy Throughput <sup>[3]</sup>                         | 37 MWh                                     |          | 50 MWh                  |
| Certification                                            | UN38.3, CE, CB                             |          |                         |

[1] Max. 64 pcs can parallel with CAN-Bridge.  
[2] Operating current is affected by temperature and SOC.  
[3] Conditions apply, refer to Deye Warranty Letter.  
[4] The warranty period depends on the final installation site of the battery system. For more information, please refer to the warranty policy.



| Product Comparison |                        |                         |      |          |                     |
|--------------------|------------------------|-------------------------|------|----------|---------------------|
| Model              | Nominal Energy         | Charge / Discharge Rate | DoD  | Warranty | Size                |
| SE-F5 Lite         | 5.12kWh, 51.2V, 100Ah  | 0.5C/0.6C               | 80%  | 5 years  | 360 x 545 x 142.5mm |
| SE-F5-A            | 5.12kWh, 51.2V, 100Ah  | 1C/1C                   | 80%  | 5 years  | 360 x 545 x 142.5mm |
| SE-F5 Plus-A       | 5.12kWh, 51.2V, 100Ah  | 1C/1C                   | 100% | 10 years | 360 x 545 x 142.5mm |
| SE-F12 Lite        | 12.03kWh, 51.2V, 235Ah | 0.5C/0.6C               | 95%  | 10 years | 400 x 594 x 233mm   |
| SE-F12-A           | 12.03kWh, 51.2V, 235Ah | 1C/1C                   | 95%  | 10 years | 400 x 594 x 233mm   |
| SE-F16-A           | 16kWh, 51.2V, 314Ah    | 0.5C/0.7C               | 100% | 10 years | 400 x 737 x 233mm   |



Spring Series  
Residential ESS Solution

All-in-One ESS (LV)



RW-F5.3-1H3 (EU, AS, AF, LATAM)



Enhanced Reliability

- Built-in Intelligent BMS, providing complete protection
- Natural cooling
- IP65 - rated for indoor and outdoor use
- Wide temperature range : -20°C ~ 55°C (with heating)



Flexible Expansion

- Max.16 units in parallel ( 80kW/84.8kWh )  
Support expansion of Deye 5.1kWh LV battery,allowing up to 31 batteries for a Max. capacity of 163.2kWh



Easy Installation

- Flat design, wall-mounted, saving installation space, quick and easy installation



Smart Application

- Peak-shaving, smart load, AC couple etc.
- Fast switching time of 4ms, ensuring your energy security



All-in-One Design

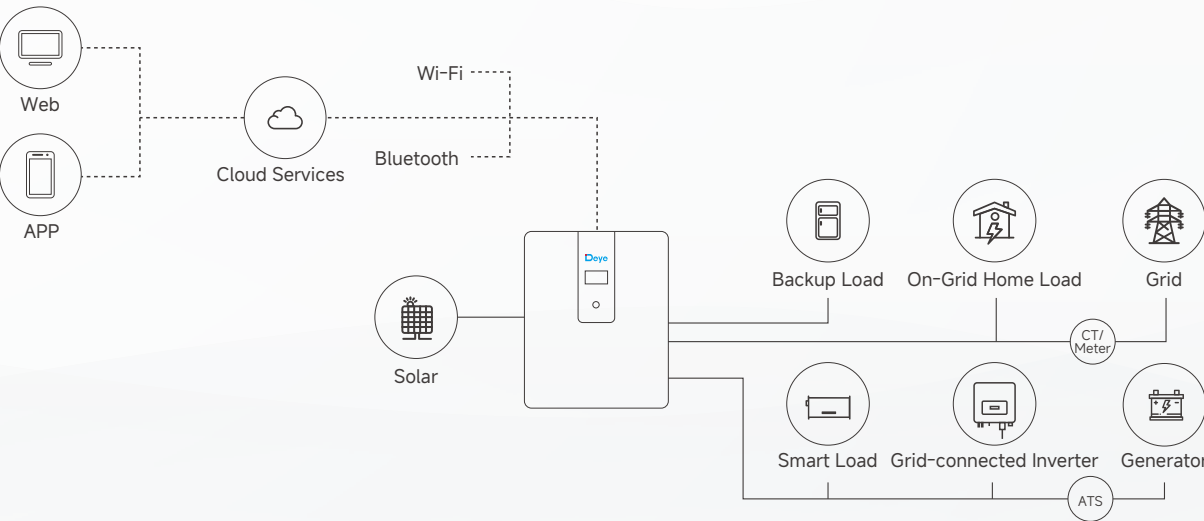
- Integrated 5kW hybrid inverter and 5.3kWh LFP battery



Intelligent Control

- Comfortable and easy control via App, PC or Touch-Display

System Application Topology Diagram



RW-F5.3-1H3 (EU, AS, AF, LATAM)

Technical Data

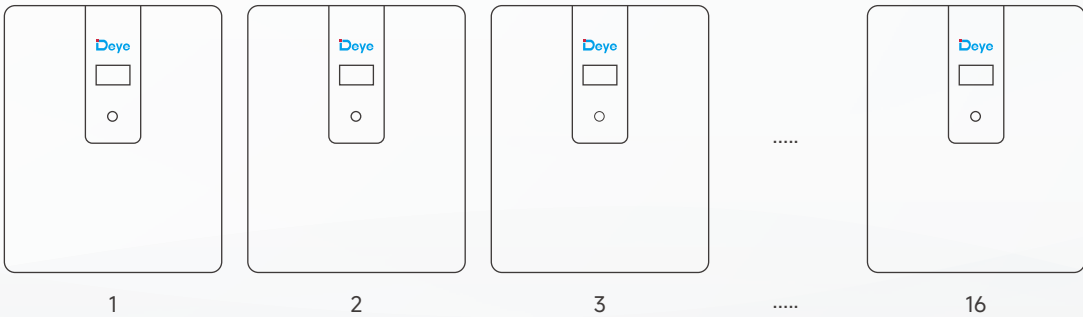


| AC Technical Specification                           |                                        |
|------------------------------------------------------|----------------------------------------|
| Model                                                | RW-F5.3-1H3                            |
| Rated AC Input / Output Active Power ( W )           | 5000 / 5000                            |
| Max AC Input / Output Apparent Power ( VA )          | 5500                                   |
| Peak Power ( off grid )                              | 2 time of rated power, 10s             |
| AC Output Rated Current ( A )                        | 22.8 / 21.8                            |
| Max. AC Current ( A )                                | 25 / 24                                |
| Max Continuous AC Passthrough ( grid to load ) ( A ) | 35                                     |
| Rated Input / Output Voltage / Range ( V )           | 220V / 230, 0.85Un-1.1Un               |
| Rated Input / Output Grid Frequency/Range ( Hz )     | 50Hz / 45Hz ~ 55Hz, 60Hz / 55Hz ~ 65Hz |
| Grid Connection Form                                 | L+N+PE                                 |
| Power Factor                                         | 0.8 leading to 0.8 lagging             |
| Total Harmonic Distortion ( THDi )                   | <3% ( of nominal power )               |
| DC injection current ( mA )                          | <0.5% In                               |

| DC Technical Specification                |                                          |
|-------------------------------------------|------------------------------------------|
| Max. PV Access Power ( W )                | 10000                                    |
| Max. PV Input Power ( W )                 | 8000                                     |
| Max. PV Input Voltage ( Vdc )             | 500                                      |
| Start Up PV Voltage ( Vdc )               | 125                                      |
| MPPT Voltage Range ( Vdc )                | 150 ~ 425                                |
| Full Load MPPT Voltage Range ( Vdc )      | 300 ~ 425                                |
| Rated PV Input Voltage ( Vdc )            | 370                                      |
| Max. Operating PV Input Current ( A )     | 18+18                                    |
| Max. PV Input Short-circuit Current ( A ) | 27+27                                    |
| Number of MPP Trackers                    | 2                                        |
| No. of Strings Per MPP Tracker            | 1 + 1                                    |
| Battery Chemistry                         | LiFePO4                                  |
| Battery Nominal Voltage ( V )             | 51.2                                     |
| Battery Energy Configuration ( kWh )      | 5.32                                     |
| Max. Charging / Discharging Current ( A ) | 100                                      |
| Battery Operating Voltage ( V )           | 44.8 ~ 57.6                              |
| Battery Cycle Life                        | ≥6000 ( @25°C±2°C, 0.5C / 0.5C, 80%EOL ) |

| Other Technical Specification          |                                                                                                                       |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Model                                  | RW-F5.3-1H3                                                                                                           |
| Dimension ( W × D × H, mm )            | 616 × 191 × 690 ( Excluding connectors and brackets )                                                                 |
| Weight Appr. ( kg )                    | 71                                                                                                                    |
| IP Rating of Enclosure                 | IP65                                                                                                                  |
| Operating Temperature Range ( °C )     | -20°C ~ 55°C (with heating)                                                                                           |
| Permissible Ambient Humidity           | 0~100%                                                                                                                |
| Inverter Topology                      | Non-Isolated                                                                                                          |
| Over Voltage Category                  | OVC II ( DC ), OVC III ( AC )                                                                                         |
| Type Of Cooling                        | Natural Cooling                                                                                                       |
| Noise ( dB )                           | <30                                                                                                                   |
| Display                                | Touch LCD                                                                                                             |
| Monitor Mode                           | WIFI, Bluetooth                                                                                                       |
| Installation Style                     | Wall-Mounted, Floor-Mounted                                                                                           |
| Max. Efficiency                        | 97%                                                                                                                   |
| Max. charging / discharging Efficiency | 95.5%                                                                                                                 |
| MPPT Efficiency                        | >99%                                                                                                                  |
| Safety EMC / Standard                  | IEC / EN 61000-6-1 / 2 / 3 / 4 , IEC / EN 62109-1, IEC / EN 62109-2                                                   |
| Grid Regulation                        | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105         |
| Certification                          | UN38.3, CE, CB, IEC62619                                                                                              |
| Warranty Period                        | 5/10 years (the Warranty Period Depends on the Final Installation Site.<br>More Info Please Refer to Warranty Policy) |

| Maximum support for 16 units in parallel |              |
|------------------------------------------|--------------|
| RW-F5.3-1H3                              | 80kW/84.8kWh |



Spring Series  
Residential ESS Solution

Rack-Mounted Battery(LV)



Eco-Friendly

- Use environmental protection materials, the whole module non-toxic, pollution-free



Convenient

- Battery module auto networking, easy maintenance
- Support remote monitoring and upgrade
- Support USB drive upgrade the firmware



Reliable

- Support high discharge power
- IP20, natural cooling
- Wide temperature range : -20°C to 55°C



Safer

- Cobalt Free Lithium Iron Phosphate LFP Battery : safety and long lifespan, high efficiency and high power
- Intelligent BMS, providing complete protection

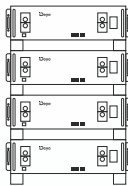


Flexible

- Modular design, easy to expand, Max. 64 units in parallel, Max. capacity of 327kWh
- Suitable for residential and commercial applications to increase the self-consumption ratio

SE-G5.1 Pro-B (EU, NA, AU)

Technical Data



Main Parameters

|                                      |                                                                           |     |
|--------------------------------------|---------------------------------------------------------------------------|-----|
| Battery Chemistry                    | LiFePO <sub>4</sub>                                                       |     |
| Built-in Circuit Breaker             | 125A 2P, 60Vdc                                                            |     |
| Capacity ( Ah )                      | 100                                                                       |     |
| Scalability                          | Max. 64 pcs pack ( 327kWh ) in parallel ( Max. 32 pcs no external setup ) |     |
| Nominal Voltage ( V )                | 51.2                                                                      |     |
| Operating Voltage ( V )              | 43.2 ~ 57.6                                                               |     |
| Energy ( kWh )                       | 5.12                                                                      |     |
| Usable Energy ( kWh ) <sup>[1]</sup> | 5.12                                                                      |     |
| Charge / Discharge                   | Recommend                                                                 | 50  |
| Current ( A ) <sup>[2]</sup>         | Max.                                                                      | 100 |
|                                      | Peak ( 2mins, 25°C )                                                      | 150 |

Other Parameters

|                              |                                                                                                 |
|------------------------------|-------------------------------------------------------------------------------------------------|
| Recommend Depth of Discharge | 90%                                                                                             |
| Dimension ( W × H × D, mm )  | 440 × 133 × 540                                                                                 |
| Weight Approximate ( kg )    | 45                                                                                              |
| Master LED Indicator         | 5LED ( SOC : 20% ~ SOC100% ) , 3LED ( working, alarming, protecting )                           |
| IP Rating of Enclosure       | IP20                                                                                            |
| Operating Temperature        | Charge : 0~55°C, Discharge : -20°C~55°C                                                         |
| Storage Temperature          | 0°C ~ 35°C                                                                                      |
| Humidity                     | 5% ~ 95%                                                                                        |
| Altitude                     | ≤2000m                                                                                          |
| Cycle Life                   | ≥6000 ( 25°C±2°C, 0.5C / 0.5C, 90%DOD, 70%EOL )                                                 |
| Installation                 | Wall-Mounted, Floor-Mounted,<br>Rack-Mounted ( 19-inch standard cabinet, cabinet depth ≥600mm ) |
| Communication Port           | CAN2.0, RS485                                                                                   |
| Warranty Period              | 5 Years / 10 Years <sup>[4]</sup>                                                               |
| Energy Throughput            | 16MWh@70%EOL                                                                                    |
| Certification                | UN38.3, IEC62619, CE, CB, UK, VDE 2510-50, CEI 0-21, FCC, UL1973, UL9540, UL9540A               |

[1] DC Usable Energy, test conditions: 100% DOD, 0.5C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.

[2] The current is affected by temperature and SOC.

[3] Conditions apply, refer to Deye Warranty Letter.

[4] The warranty period depends on the final installation site of the battery system. For more information, please refer to the warranty policy.

Spring Series  
Residential ESS Solution

Wall-Mounted Battery(LV)



Exceptional Performance

- RW-F10.2/RW-F10.2-B supports up to 1C/1.2C charging and discharging
- Peak discharge current of 300A for up to 2mins



Smarter

- Battery module auto networking (No DIP switch code)
- Support Deye remote monitoring and upgrade



Enhanced Reliability

- ≥6000 Cycles, 90%DOD, 70%EOL
- 10 years warranty for long-term peace of mind
- Wide temperature range: -20°C~55°C
- IP65-rated for indoor and outdoor use



More Flexible

- Modular design, easy to expand
- Support Max. 32 units in parallel
- RW-F10.2 has a maximum capacity of 326kWh
- RW-F10.2-B has a maximum capacity of 327kWh
- Suitable for residential and commercial use



Safer

- LFP Battery: safety, long lifespan and high-energy density
- Built-in intelligent BMS, providing complete protection
- Support natural cooling
- Use high-quality environmental protection materials

RW-F10.2 (EU, AU)  
RW-F10.2-B (NA)

Technical Data



Main Parameters

| Model                                              | RW-F10.2 (EU, AU)                             |                           | RW-F10.2-B (NA)                              |
|----------------------------------------------------|-----------------------------------------------|---------------------------|----------------------------------------------|
| Battery Type                                       | LiFePO <sub>4</sub>                           |                           |                                              |
| Built-In Circuit Breaker                           | 125A 4P 60Vdc                                 |                           |                                              |
| Capacity ( Ah )                                    | 200                                           |                           |                                              |
| Nominal Voltage ( V )                              | 51.2                                          |                           |                                              |
| Operating Voltage ( V )                            | 43.2~57.6                                     |                           |                                              |
| Scalability                                        | Max. 32 pcs pack in parallel<br>(Max. 326kwh) |                           | Max. 32 pcs pack in paralle<br>(Max. 327kWh) |
| Rated Energy ( kWh )                               | 10.2                                          |                           | 10.24                                        |
| Usable Energy ( kWh )                              | 10.2                                          |                           | 9.2                                          |
| Rated DC Power ( kW )                              | 6                                             |                           | /                                            |
| Max DC Power ( kW )                                | 12                                            |                           | /                                            |
| Charge / Discharge<br>Current ( A ) <sup>[2]</sup> | Recommend                                     | Charge:100/Discharge: 100 |                                              |
|                                                    | Max.                                          | Charge:198/Discharge: 240 |                                              |
|                                                    | Peak(2mins,25°C)                              | 300                       |                                              |

Other Parameters

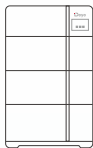
|                                           |                                                          |                                                   |
|-------------------------------------------|----------------------------------------------------------|---------------------------------------------------|
| Recommend Depth of Discharge              | 90%                                                      |                                                   |
| Dimension (W × H × D, mm)                 | 600 × 760 × 200<br>(Without hanging board)               | 600×830×200<br>(Without hanging board)            |
| Weight Approximate ( kg )                 | 104                                                      | 235.9 lbs.(107kg)                                 |
| Master LED indicator                      | SOC state(20%-100%)<br>work state( alarming, protecting) | LED(SOC:20%-100%<br>and working state )           |
| IP Rating of Enclosure                    | IP65                                                     | NEMA 3R(IP65)                                     |
| Operating Temperature ( °C )              | Charge:1~55°C                                            | Charge: 33 °F ~ 131 °F (1 ~ 55°C)                 |
|                                           | Discharge:-20°C~55°C                                     | Discharge: -4 °F ~ 131 °F (-20°C ~ 55°C)          |
|                                           |                                                          | Recommend: 59 °F ~ 95 °F (15°C ~ 35°C)            |
| Storage Temperature ( °C )                | 32°F ~ 95°F (0 ~ 35°C)                                   |                                                   |
| External Ambient Temperature Range ( °C ) | /                                                        | -4°F ~ 131°F<br>(-20°C ~ 55°C, with heating film) |
| Humidity                                  | 5%-95%                                                   |                                                   |
| Altitude                                  | ≤ 3000m                                                  | ≤ Max. 9,843 ft (3,000m)                          |
| Cycle Life                                | ≥6000(25°C+2°C,0.5C/0.5C,90%DOD,70%EOL)                  |                                                   |
| Installation Location                     | Wall-Mounted, Floor-Mounted                              |                                                   |
| Communication Port                        | CAN2.0., RS485                                           |                                                   |
| Warranty Period                           | 10 years                                                 |                                                   |
| Energy Throughput                         | 32MWh(25°C,0.5C/0.5C,70%EOL)                             |                                                   |
| Certification                             | UN38.3, IEC 62619, CE,                                   |                                                   |
|                                           | CEI 0-21, VDE 2510-50, CEC                               |                                                   |
|                                           | UN38.3, FCC, UL 1973, UL 9540A                           |                                                   |

Spring Series  
Residential ESS Solution

Stacked Battery(LV)



AI-W5.1-B (EU, AU)  
Technical Data



Main Parameters

|                                                |                    |                     |            |            |            |            |            |
|------------------------------------------------|--------------------|---------------------|------------|------------|------------|------------|------------|
| Battery Model Number                           |                    | AI-W5.1-B           | AI-W10.2-B | AI-W15.3-B | AI-W20.4-B | AI-W25.6-B | AI-W30.7-B |
| Number of battery units in parallel (Optional) |                    | 1                   | 2          | 3          | 4          | 5          | 6          |
| Battery Chemistry                              |                    | LiFePO <sub>4</sub> |            |            |            |            |            |
| Built-in Circuit Breaker                       |                    | 125A 2P, 60Vdc      |            |            |            |            |            |
| Battery Module Energy ( kWh )                  |                    | 5.12                |            |            |            |            |            |
| Battery Module Voltage ( V )                   |                    | 51.2                |            |            |            |            |            |
| Battery Module Capacity ( Ah )                 |                    | 100                 |            |            |            |            |            |
| Nominal Voltage ( V )                          |                    | 51.2                |            |            |            |            |            |
| Operating Voltage ( V )                        |                    | 44.8 ~ 57.6         |            |            |            |            |            |
| Nominal Energy ( kWh )                         |                    | 5.12                | 10.24      | 15.36      | 20.48      | 25.6       | 30.72      |
| Usable Energy ( kWh ) <sup>[1]</sup>           |                    | 4.6                 | 9.2        | 13.8       | 18.4       | 23         | 27.6       |
| Rated DC Power ( KW )                          |                    | 2.5                 | 5          | 7.5        | 10         | 12         | 12         |
| Charge / Discharge<br>Current ( A )            | Recommend          | 50                  | 100        | 150        | 200        | 250        | 250        |
|                                                | Max.               | 100                 | 200        | 250        | 250        | 250        | 250        |
|                                                | Peak ( 10s, 25°C ) | 150                 | 270        | 360        | 360        | 360        | 360        |

Other Parameters

|                                             |  |                                                                                                                                              |             |              |              |              |              |
|---------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|--------------|--------------|--------------|
| Recommend Depth of Discharge                |  | 90%                                                                                                                                          |             |              |              |              |              |
| System Dimension ( W × D × H, mm )          |  | 720×255×569                                                                                                                                  | 720×255×850 | 720×255×1131 | 720×255×1412 | 720×255×1693 | 720×255×1974 |
| System Weight ( kg )                        |  | 74.5                                                                                                                                         | 127.5       | 180.5        | 233.5        | 286.5        | 339.5        |
| Battery Module Dimension ( W × D × H, mm )  |  | 720±3×254±1.5×300±1.5                                                                                                                        |             |              |              |              |              |
| Battery Module Weight ( kg )                |  | 53                                                                                                                                           |             |              |              |              |              |
| MasterLED Indicator                         |  | Battery module : 3LED ( working, alarming, protecting ) ,<br>PDU module : 5LED ( SOC : 20% ~ 100% ) & 3LED ( working, alarming, protecting ) |             |              |              |              |              |
| IP Rating of Enclosure                      |  | IP65 ( after stacking )                                                                                                                      |             |              |              |              |              |
| Operating Temperature                       |  | Charge : 0°C~55°C ( -20°C~55°C when heating on ) / Discharge : -20°C~55°C                                                                    |             |              |              |              |              |
| Standard charging method by manufacturer    |  | Charge at 25±2°C at constant current 50A until the voltage reaches 57.6V.                                                                    |             |              |              |              |              |
| Standard discharging method by manufacturer |  | Discharge at 25±2°C at constant current 50A until the voltage reaches 44.8v.                                                                 |             |              |              |              |              |
| Storage Temperature                         |  | 0°C ~ 35°C                                                                                                                                   |             |              |              |              |              |
| Humidity                                    |  | 5% ~ 95%, non-condensing                                                                                                                     |             |              |              |              |              |
| Altitude                                    |  | ≤3000m                                                                                                                                       |             |              |              |              |              |
| Installation                                |  | Floor-Mounted                                                                                                                                |             |              |              |              |              |
| Communication Port                          |  | CAN2.0, RS485                                                                                                                                |             |              |              |              |              |
| Cycle Life                                  |  | ≥6000 ( 25°C±2°C , 0.5C / 0.5C, 90%DOD, 70%EOL )                                                                                             |             |              |              |              |              |
| Energy Throughput                           |  | 16MWh ( Battery Module @70%EOL )                                                                                                             |             |              |              |              |              |
| Warranty Period <sup>[3]</sup>              |  | 10 years                                                                                                                                     |             |              |              |              |              |
| Certification                               |  | UN38.3, IEC62619, CE, UK, VDE2510-50, CEI0-21,CE-LVD, CEC, FCC, UL1973, UL9540A                                                              |             |              |              |              |              |

[1]DC Usable Energy, test conditions: 90% DOD, 0.5C charge & discharge at 25°C . System usable energy may vary due to system configuration parameters.  
[2]The current is affected by temperature and SOC.  
[3]Conditions apply, refer to Deye Warranty Letter.  
[4]Made in China.



Reliable

- High discharge power, IP65
- Natural cooling, wide temp: -20°C to 55°C



Quick Installation

- Flat, stackable design
- Floor-mounted, no wiring



Convenient

- Auto networking, easy maintenance
- Remote monitoring, firmware upgrades



Eco-Friendly

- Non-toxic materials
- Pollution-free



Flexible

- Modular, Max. 6 clusters in parallel (36pcs)
- Max capacity 184kWh
- Residential/commercial use



Safer

- Cobalt-free LFP battery
- Intelligent BMS, long lifespan, high efficiency

Spring Series  
Residential ESS Solution

All-in-One ESS (LV)



AI-W5.1-B-ESS (EU, AU)



All-in-One

- Hybrid inverter and LFP battery in one sleek system



Scalable Capacity

- Modular design expandable from 5 kWh to 50 kWh



Effortless Installation

- Tool-free stacking for quick and easy installation



Smarter Energy Use

- Peak-shaving, smart load, AC coupling, time of use



Uninterrupted Supply

- 4 ms seamless switchover from grid to back-up for energy security



Smart Control

- Convenient management via App, PC, or touch display

≥6000

Cycles

IP65

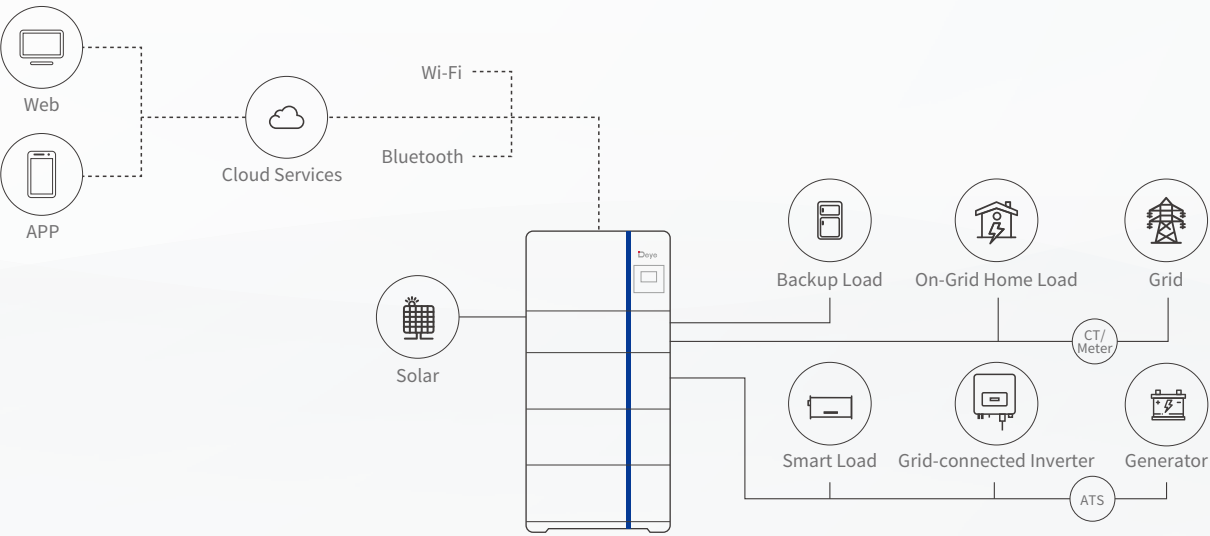
Rated for indoor and outdoor use

70%

EOL

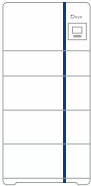
10 years

Warranty for long-term peace of mind



AI-W5.1-B-ESS (EU, AU)

Technical Data



| Model                                            | AI-W5.1-3.6P1-EU-B                                                                                    | AI-W5.1-5P1-EU-B | AI-W5.1-6P1-EU-B | AI-W5.1-7P1-EU-B | AI-W5.1-7.6P1-EU-B | AI-W5.1-8P1-EU-B | AI-W5.1-10P1-EU-B |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|--------------------|------------------|-------------------|
| Battery Input Data                               |                                                                                                       |                  |                  |                  |                    |                  |                   |
| Battery Type                                     | Lithium-ion                                                                                           |                  |                  |                  |                    |                  |                   |
| Battery Voltage                                  | 40-60                                                                                                 |                  |                  |                  |                    |                  |                   |
| Max. Charging Current(A)                         | 90                                                                                                    | 120              | 135              | 175              | 190                | 190              | 210               |
| Max. Discharging Current(A)                      | 90                                                                                                    | 120              | 135              | 175              | 190                | 190              | 210               |
| Charging Strategy for Li-Ion Battery             | Self-adaption to BMS                                                                                  |                  |                  |                  |                    |                  |                   |
| Number of Battery Input                          | 1                                                                                                     |                  |                  |                  |                    |                  |                   |
| PV String Input Data                             |                                                                                                       |                  |                  |                  |                    |                  |                   |
| Max. PV access power(W)                          | 7200                                                                                                  | 10000            | 12000            | 14000            | 15200              | 16000            | 20000             |
| Max. PV Input Power(W)                           | 5760                                                                                                  | 8000             | 9600             | 11200            | 12160              | 12800            | 16000             |
| Max. PV Input Voltage(V)                         | 500                                                                                                   |                  |                  |                  |                    |                  |                   |
| Start-up Voltage(V)                              | 125                                                                                                   |                  |                  |                  |                    |                  |                   |
| PV Input Voltage Range(V)                        | 125-500                                                                                               |                  |                  |                  |                    |                  |                   |
| MPPT Voltage Range(V)                            | 150-425                                                                                               |                  |                  |                  |                    |                  |                   |
| Full Load MPPT Voltage Range(V)                  | 300-425                                                                                               |                  |                  | 200-425          |                    |                  | 250-425           |
| Rated PV Input Voltage(V)                        | 370                                                                                                   |                  |                  |                  |                    |                  |                   |
| Max. Operating PV Input Current(A)               | 18+18                                                                                                 |                  |                  | 32+32            |                    |                  |                   |
| Max. Input Short-Circuit Current(A)              | 27+27                                                                                                 |                  |                  | 48+48            |                    |                  |                   |
| No.of MPPT Trackers/No.of String MPPT Tracker    | 2/1+1                                                                                                 |                  |                  | 2/2+2            |                    |                  |                   |
| Max. Inverter Backfeed Current to The Array      | 0                                                                                                     |                  |                  |                  |                    |                  |                   |
| AC Input/Output Data                             |                                                                                                       |                  |                  |                  |                    |                  |                   |
| Rated AC Input/Output Active Power(W)            | 3600                                                                                                  | 5000             | 6000             | 7000             | 7600               | 8000             | 10000             |
| Max. AC Input/Output Apparent Power(VA)          | 3960                                                                                                  | 5500             | 6600             | 7700             | 8360               | 8800             | 11000             |
| Peak Power (off-grid)(W)                         | 2 times of rated power, 10s                                                                           |                  |                  |                  |                    |                  |                   |
| Rated AC Input/Output Current(A)                 | 16.4/15.7                                                                                             | 22.7/21.7        | 27.3/26.1        | 31.9/30.5        | 34.5/33            | 36.4/34.8        | 45.5/43.5         |
| Max. AC Input/Output Current(A)                  | 18/17.2                                                                                               | 25/23.9          | 30/28.7          | 35/33.5          | 38/36.3            | 40/38.3          | 50/47.9           |
| Max. Continuous AC Passthrough (grid to load)(A) | 35                                                                                                    |                  | 40               | 50               |                    |                  |                   |
| Max. Output Fault Current(A)                     | 36                                                                                                    | 50               | 60               | 70               | 76                 | 80               | 100               |
| Max. Output Overcurrent Protection(A)            | 80                                                                                                    |                  | 140              |                  |                    |                  |                   |
| Rated Input/Output Voltage/Range(V)              | 230V/240V 0.85Un-1.1Un                                                                                |                  |                  |                  |                    |                  |                   |
| Grid Connection Form                             | L+N+PE                                                                                                |                  |                  |                  |                    |                  |                   |
| Rated Input/Output Grid Frequency/Range          | 50Hz/45Hz-55Hz 60Hz/45Hz-65Hz                                                                         |                  |                  |                  |                    |                  |                   |
| Power Factor Adjustment Range                    | 0.8 leading-0.8 lagging                                                                               |                  |                  |                  |                    |                  |                   |
| Total Current Harmonic Distortion THDi           | <3% (of nominal power)                                                                                |                  |                  |                  |                    |                  |                   |
| DC Injection Current                             | <0.5%In                                                                                               |                  |                  |                  |                    |                  |                   |
| Efficiency                                       |                                                                                                       |                  |                  |                  |                    |                  |                   |
| Max. Efficiency                                  | 97.6%                                                                                                 |                  |                  |                  |                    |                  |                   |
| Euro Efficiency                                  | 96.5%                                                                                                 |                  |                  |                  |                    |                  |                   |
| MPPT Efficiency                                  | >99%                                                                                                  |                  |                  |                  |                    |                  |                   |
| General Data                                     |                                                                                                       |                  |                  |                  |                    |                  |                   |
| Operating Temperature Range                      | -40 to +60°C, >45°C Derating                                                                          |                  |                  |                  |                    |                  |                   |
| Permissible Ambient Humidity                     | 0-100%                                                                                                |                  |                  |                  |                    |                  |                   |
| Permissible Altitude                             | 2000m                                                                                                 |                  |                  |                  |                    |                  |                   |
| Noise                                            | <30 dB(A)                                                                                             |                  |                  |                  |                    |                  |                   |
| Ingress Protection(IP) Rating                    | IP 65                                                                                                 |                  |                  |                  |                    |                  |                   |
| Inverter Topology                                | Non-Isolated                                                                                          |                  |                  |                  |                    |                  |                   |
| Over Voltage Category                            | OVC II(DC), OVC III(AC)                                                                               |                  |                  |                  |                    |                  |                   |
| Cabinet size(W*H*D) [mm]                         | 720W×399.2H×256D (Excluding connectors and brackets)                                                  |                  |                  |                  |                    |                  |                   |
| Weight(kg)                                       | 31.6                                                                                                  |                  |                  |                  |                    |                  |                   |
| Warranty                                         | 5 Years/10 Years                                                                                      |                  |                  |                  |                    |                  |                   |
| Type of Cooling                                  | Intelligent Air Cooling                                                                               |                  |                  |                  |                    |                  |                   |
| Grid Regulation                                  | IEC 61727,IEC 62116,CEI 0-21,EN 50549,NRS 097,RD 140, UNE 217002,OVE-Richtlinie R25,G99,VDE-AR-N 4105 |                  |                  |                  |                    |                  |                   |
| Safety EMC/Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                |                  |                  |                  |                    |                  |                   |

| Model                                            | AI-W5.1-5P3-EU-B                                                                                      | AI-W5.1-6P3-EU-B | AI-W5.1-8P3-EU-B | AI-W5.1-10P3-EU-B | AI-W5.1-12P3-EU-B |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------------|------------------|-------------------|-------------------|
| Battery Input Data                               |                                                                                                       |                  |                  |                   |                   |
| Battery Type                                     | Lithium-ion                                                                                           |                  |                  |                   |                   |
| Battery Voltage                                  | 40-60                                                                                                 |                  |                  |                   |                   |
| Max. Charging Current(A)                         | 120                                                                                                   | 130              | 190              | 210               | 240               |
| Max. Discharging Current(A)                      | 120                                                                                                   | 130              | 190              | 210               | 240               |
| Charging Strategy for Li-Ion Battery             | Self-adaption to BMS                                                                                  |                  |                  |                   |                   |
| Number of Battery Input                          | 1                                                                                                     |                  |                  |                   |                   |
| PV String Input Data                             |                                                                                                       |                  |                  |                   |                   |
| Max. PV access power(W)                          | 10000                                                                                                 | 12000            | 16000            | 20000             | 24000             |
| Max. PV Input Power(W)                           | 8000                                                                                                  | 9600             | 12800            | 16000             | 19200             |
| Max. PV Input Voltage(V)                         | 800                                                                                                   |                  |                  |                   |                   |
| Start-up Voltage(V)                              | 160                                                                                                   |                  |                  |                   |                   |
| PV Input Voltage Range(V)                        | 160-800                                                                                               |                  |                  |                   |                   |
| MPPT Voltage Range(V)                            | 200-650                                                                                               |                  |                  |                   |                   |
| Full Load MPPT Voltage Range(V)                  | 350-650                                                                                               |                  |                  |                   |                   |
| Rated PV Input Voltage(V)                        | 550                                                                                                   |                  |                  |                   |                   |
| Max. Operating PV Input Current(A)               | 20+20                                                                                                 |                  |                  | 36+20             |                   |
| Max. Input Short-Circuit Current(A)              | 30+30                                                                                                 |                  |                  | 54+30             |                   |
| No.of MPPT Trackers/No.of String MPPT Tracker    | 2/1+1                                                                                                 |                  |                  | 2/1+1             |                   |
| Max. Inverter Backfeed Current to The Array      | 0                                                                                                     |                  |                  |                   |                   |
| AC Input/Output Data                             |                                                                                                       |                  |                  |                   |                   |
| Rated AC Input/Output Active Power(W)            | 5000                                                                                                  | 6000             | 8000             | 10000             | 12000             |
| Max. AC Input/Output Apparent Power(VA)          | 5500                                                                                                  | 6600             | 8800             | 11000             | 13200             |
| Peak Power (off-grid)(W)                         | 2 times of rated power, 10s                                                                           |                  |                  |                   |                   |
| Rated AC Input/Output Current(A)                 | 7.6/7.2                                                                                               | 9.1/8.7          | 12.1/11.6        | 15.2/14.5         | 18.2/17.4         |
| Max. AC Input/Output Current(A)                  | 8.4/8                                                                                                 | 10/9.6           | 13.4/12.8        | 16.7/15.9         | 20/19.1           |
| Max. Continuous AC Passthrough (grid to load)(A) | 45                                                                                                    |                  |                  |                   |                   |
| Max. Output Fault Current(A)                     | 16.8                                                                                                  | 20               | 26.8             | 33.4              | 40                |
| Max. Output Overcurrent Protection(A)            | 70                                                                                                    |                  |                  |                   |                   |
| Rated Input/Output Voltage/Range(V)              | 220/380V,230/400V 0.85Un-1.1Un                                                                        |                  |                  |                   |                   |
| Grid Connection Form                             | 3L+N+PE                                                                                               |                  |                  |                   |                   |
| Rated Input/Output Grid Frequency/Range          | 50Hz/45Hz-55Hz 60Hz/55Hz-65Hz                                                                         |                  |                  |                   |                   |
| Power Factor Adjustment Range                    | 0.8 leading-0.8 lagging                                                                               |                  |                  |                   |                   |
| Total Current Harmonic Distortion THDi           | <3% (of nominal power)                                                                                |                  |                  |                   |                   |
| DC Injection Current                             | <0.5%In                                                                                               |                  |                  |                   |                   |
| Efficiency                                       |                                                                                                       |                  |                  |                   |                   |
| Max. Efficiency                                  | 97.6%                                                                                                 |                  |                  |                   |                   |
| Euro Efficiency                                  | 97.0%                                                                                                 |                  |                  |                   |                   |
| MPPT Efficiency                                  | >99%                                                                                                  |                  |                  |                   |                   |
| General Data                                     |                                                                                                       |                  |                  |                   |                   |
| Operating Temperature Range                      | -40 to +60℃, >45℃ Derating                                                                            |                  |                  |                   |                   |
| Permissible Ambient Humidity                     | 0-100%                                                                                                |                  |                  |                   |                   |
| Permissible Altitude                             | 2000m                                                                                                 |                  |                  |                   |                   |
| Noise                                            | ≤ 55 dB                                                                                               |                  |                  |                   |                   |
| Ingress Protection(IP) Rating                    | IP 65                                                                                                 |                  |                  |                   |                   |
| Inverter Topology                                | Non-Isolated                                                                                          |                  |                  |                   |                   |
| Over Voltage Category                            | OVC II(DC), OVC III(AC)                                                                               |                  |                  |                   |                   |
| Cabinet size(W*H*D) [mm]                         | 720W×460.5H×254D (Excluding connectors and brackets)                                                  |                  |                  |                   |                   |
| Weight(kg)                                       | 44                                                                                                    |                  |                  |                   |                   |
| Warranty                                         | 5 Years/10 Years                                                                                      |                  |                  |                   |                   |
| Type of Cooling                                  | Intelligent Air Cooling                                                                               |                  |                  |                   |                   |
| Grid Regulation                                  | IEC 61727,IEC 62116,CEI 0-21,EN 50549,NRS 097,RD 140, UNE 217002,OVE-Richtlinie R25,G99,VDE-AR-N 4105 |                  |                  |                   |                   |
| Safety EMC/Standard                              | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                |                  |                  |                   |                   |

Spring Series  
Residential ESS Solution

All-in-One ESS (LV)



**16 kWh per Module. Better Value.**  
Approx. 20% lower system cost than  
conventional 8 kWh stackable solutions



**Offline Wireless Zero-Export Solution**  
LoRa-based wireless energy management  
with CT monitoring, no internet required.

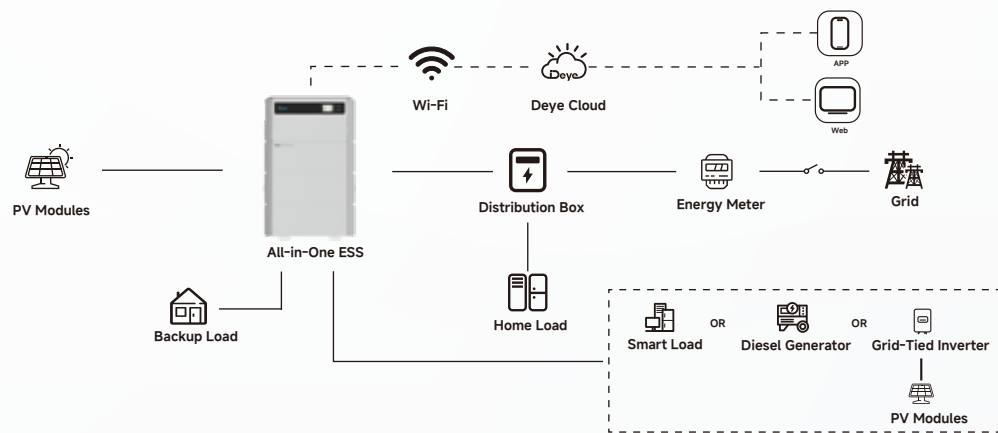


**Lower Standby Power Consumption**  
The battery's DC-DC-free design enables  
negligible nighttime consumption and  
extended warehouse storage.

All-in-One Home ESS  
AI-W16 (EU, AU)

|                                                                                                                               |                                                                                                                                  |                                                                                                                                         |                                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| <br>3.6-20kW power options                 | <br>Rapid installation                        | <b>200%</b><br>2x peak power<br>output (10s)                                                                                            | <b>97.6%</b> <br>Max. efficiency    |
| <br>200% PV oversizing                     | <br>Scalable up to 96kWh                      | <br>Max. 70A bypass current                          | <br>8000+ life cycles               |
| <br>Max. 380A charge/<br>discharge current | <br>4ms<br>Seamless on/<br>off-grid switching | <br>Support short-term immersion<br>in 0.5m of water | <br>1-55°C<br>operation temperature |

System Architecture



Flexible Parallel Expansion

Modular expansion base minimizes wiring and installation time.



**Standard Configuration**  
1 Inverter + 16 kWh Battery



**Capacity Expansion (DC Side)**  
Up to 6 Batteries in Parallel  
(Max. 96 kWh)



**Power Expansion (AC Side)**  
Up to 3 Inverters in Parallel  
(Max. 60 kW / 3-Phase, 36 kW / 1-Phase)

All-in-One Home ESS  
AI-W16 (EU, AU)

Technical Data



| System Data                   |                                                                                                                          |    |    |    |    |    |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------|----|----|----|----|----|
|                               |                                                                                                                          |    |    |    |    |    |
| Battery Type                  | LiFePO <sub>4</sub>                                                                                                      |    |    |    |    |    |
| Max. Output Power             | Single-Phase: 3.6/4.4/5.6/6.7/7.5/8/10/12kW, Three-Phase: 5/6/8/10/12/15/20kW                                            |    |    |    |    |    |
| Number of Batteries           | 1                                                                                                                        | 2  | 3  | 4  | 5  | 6  |
| Nominal Energy (kWh)          | 16                                                                                                                       | 32 | 48 | 64 | 80 | 96 |
| Ingress Protection(IP) Rating | IP66                                                                                                                     |    |    |    |    |    |
| Operation Temperature Range   | Charge: 1°C- +55°C (-20°C-+55°C, with optional heating) / Discharge: -20°C- +55°C, >45°C Derating                        |    |    |    |    |    |
| Permissible Ambient Humidity  | 0-100% (condensing)                                                                                                      |    |    |    |    |    |
| Max. Operation Altitude (m)   | 3000m                                                                                                                    |    |    |    |    |    |
| Display                       | LCD+LED                                                                                                                  |    |    |    |    |    |
| Type of Cooling               | Natural Cooling                                                                                                          |    |    |    |    |    |
| Topology                      | Non-Isolated (solar), Isolated (battery)                                                                                 |    |    |    |    |    |
| Communication Interface       | WIFI, RS485, CAN, LORA, Bluetooth                                                                                        |    |    |    |    |    |
| Warranty                      | Standard 5 Years, Extendable Warranty                                                                                    |    |    |    |    |    |
| Grid Regulation               | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105, AS 4777.2 |    |    |    |    |    |
| Safety EMC/Standard           | IEC 62477, IEC 62619, SA TS 5398, IEC 62040, IEC62109-1/-2, EN61000-6-1, EN61000-6, VDE 2510-50,VDE 2510-2               |    |    |    |    |    |



| Main Parameter                       |                                     |                                                    |
|--------------------------------------|-------------------------------------|----------------------------------------------------|
| Model                                | AI-W16                              | AI-W16-H                                           |
| Battery Chemistry                    | LiFePO <sub>4</sub>                 |                                                    |
| Built-in Circuit Breaker             | 250A, 80Vdc                         |                                                    |
| Rated Capacity (Ah) <sup>[1]</sup>   | 314                                 |                                                    |
| Nominal Voltage (V)                  | 51.2                                |                                                    |
| Operating Voltage(V)                 | 41.6-58.4                           |                                                    |
| Nominal Energy (kWh)                 | 16                                  |                                                    |
| Charge Current (A) <sup>[2]</sup>    | Max.Continuous                      | 160                                                |
|                                      | Peak                                | 192                                                |
| Discharge Current (A) <sup>[2]</sup> | Max.Continuous                      | 220                                                |
|                                      | Peak                                | 264                                                |
| Depth of Discharge <sup>[3]</sup>    | 100%                                |                                                    |
| Dimension (mm , W/H/D)               | 662 x 715 x 257 (Without base)      |                                                    |
| Weight (kg)                          | 120kg                               |                                                    |
| Display                              | LED(working, protecting, alarming)  |                                                    |
| IP Rating of Enclosure               | IP66                                |                                                    |
| Operating Temperature                | Charge: 1-55°C, Discharge: -20-55°C | Charge: -20-55°C (Heating On), Discharge: -20-55°C |
| Storage Temperature                  | 0°C~35°C                            |                                                    |
| Relative Humidity                    | 95% (non-condensing)                |                                                    |
| Cycle Life <sup>[1]</sup>            | ≥8000 (70%EOL)                      |                                                    |
| Max. Energy RTE (DC) <sup>[1]</sup>  | 95%                                 |                                                    |
| Installation                         | Floor-Mounted, Stack-Mounted        |                                                    |
| Communication                        | CAN2.0                              |                                                    |
| Certification                        | UN38.3, CE, CB, UL9540A             |                                                    |
| Energy Throughput <sup>[4]</sup>     | 50 MWh                              |                                                    |
| Warranty Period <sup>[4]</sup>       | 10 years                            |                                                    |

[1] Test conditions : 0.2C Charging & Discharging, 25°C±2°C.  
[2] The current is affected by temperature and SOC.  
[3] Max. 100%DOD, adjustable as required.  
[4] Conditions apply, refer to Deye Warranty Letter.

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# SUMMER

Series

## Residential ESS Solution

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Summer Series  
Residential ESS Solution

Stacked Battery(HV)

NEW NEPT G



GB-L Lite/Plus/Ultra (EU, AU, AS, AF, LATAM)



Intelligent Management & Easy O&M

- Pack + Cell Dual-Level Online Self-Balancing Technology, expansion and battery replacement require no pre-configuration
- Deye BMS+EMS integrated control for real-time performance optimization
- Bluetooth & Deye Cloud , 24/7 monitoring & diagnostics



Superior Performance & Ultimate Safety

- 75A Continuous Output, perfectly matched with Deye 10~50kW HV inverters
- IP66 protection, Stable Operation from -20°C to 55°C
- Cluster Temperature Difference < 8°C , ensuring longer battery cycle life
- Pack-Level Pressure & Fire Protection, Cell & Connection Over-Temperature Protection



High Integration & Easy Expansion

- Built on a modular architecture, with a cable-free stacking design
- Higher energy density maximizes vertical space utilization
- Each cluster delivers 11.52~80.64kWh for residential & small C&I applications

Three-Phase ESS Solution (Recommend)

GB-L Lite/Plus/Ultra Battery



GB-L17  
Lite/Plus/Ultra



GB-L23  
Lite/Plus/Ultra



GB-L28  
Lite/Plus/Ultra



GB-L40  
Lite/Plus/Ultra



GB-L51  
Lite/Plus/Ultra



GB-L69  
Lite/Plus/Ultra

Three-Phase HV  
Hybrid Inverter



10kW (55A)

Under development



12kW (55A)

Under development



15kW (55A)

New



20kW(55A) 30kW(75A)

New



25kW(55A) 35kW(75A)

New



50kW(75A)



GB-L Lite/Plus/Ultra (EU, AU, AS, AF, LATAM)

Technical Data

|      |
|------|
| Draw |
|      |
|      |
|      |
|      |
|      |
|      |
|      |

| Model                                   |                | GB-L17 Lite                           | GB-L23 Lite | GB-L28 Lite | GB-L34 Lite  | GB-L40 Lite  | GB-L46 Lite  |
|-----------------------------------------|----------------|---------------------------------------|-------------|-------------|--------------|--------------|--------------|
| Main Parameters                         |                |                                       |             |             |              |              |              |
| Cell Chemistry                          |                | LiFePO <sub>4</sub>                   |             |             |              |              |              |
| Module model                            |                | GB-L-Pack5.76-C3                      |             |             |              |              |              |
| Module Energy (kWh)                     |                | 5.76                                  |             |             |              |              |              |
| Module Norminal Voltage (V)             |                | 57.6                                  |             |             |              |              |              |
| Module Capacity (Ah)                    |                | 100                                   |             |             |              |              |              |
| Battery Module Qty In Series (Optional) |                | 3                                     | 4           | 5           | 6            | 7            | 8            |
| System Nominal Voltage ( V )            |                | 172.8                                 | 230.4       | 288.0       | 345.6        | 403.2        | 460.8        |
| System Operating Voltage ( V )          |                | 135~197.1                             | 180~262.8   | 225~328.5   | 270~394.2    | 315~459.9    | 360~525.6    |
| System Normal Energy (kWh)              |                | 17.28                                 | 23.04       | 28.8        | 34.56        | 40.32        | 46.08        |
| Charge Current (A) <sup>[1]</sup>       | Max.Continuous | 75                                    |             |             |              |              |              |
|                                         | Peak           | 104(15s)                              |             |             |              |              |              |
| Discharge Current (A) <sup>[1]</sup>    | Max.Continuous | 75                                    |             |             |              |              |              |
|                                         | Peak           | 135(2min)                             |             |             |              |              |              |
| Other Parameters                        |                |                                       |             |             |              |              |              |
| Depth of Discharge                      |                | Recommended 80%, Max. adjustable 100% |             |             |              |              |              |
| Dimension ( W × D × H ) (mm)            |                | 610x385x597                           | 610x385x737 | 610x385x877 | 610x385x1017 | 610x385x1157 | 610x385x1297 |
| Weight Approximate (kg)                 |                | 171                                   | 220         | 269         | 318          | 367          | 416          |
| Display                                 |                | LCD                                   |             |             |              |              |              |
| Communication Port                      |                | CAN2.0, RS485, Bluetooth              |             |             |              |              |              |
| Cycle Life <sup>[2]</sup>               |                | ≥6000                                 |             |             |              |              |              |
| Working Temperature Charge              |                | 0~55                                  |             |             |              |              |              |
| ( °C )                                  | Discharge      | -20 ~ 55                              |             |             |              |              |              |
| Warranty <sup>[3]</sup>                 |                | 5 years                               |             |             |              |              |              |
| Storage Temperature ( °C )              |                | 0 ~ 35                                |             |             |              |              |              |
| Fire Protection                         |                | Aerosol, Explosion venting            |             |             |              |              |              |
| Humidity                                |                | 5%~95% RH, Non-Condensing             |             |             |              |              |              |
| Altitude (m)                            |                | ≤3000                                 |             |             |              |              |              |
| IP Rating of Enclosure                  |                | IP66                                  |             |             |              |              |              |
| Scalability                             |                | Max.16 Modules in parallel            |             |             |              |              |              |
| Instalaton Location                     |                | Floor Mount                           |             |             |              |              |              |
| Type of Cooling                         |                | Natural Cooling                       |             |             |              |              |              |
| Certification                           |                | IEC 62619/UN38.3                      |             |             |              |              |              |

1. The current is affected by temperature and SOC.  
2. 25°C±2°C, 0.5C, 100%DOD, 70%EOL.  
3. Condintions apply, refer to Deye Warranty Letter.

| Model                                   |                | GB-L51 Lite                           | GB-L57 Lite  | GB-L63 Lite  | GB-L69 Lite  | GB-L74 Lite  | GB-L80 Lite  |
|-----------------------------------------|----------------|---------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Main Parameters                         |                |                                       |              |              |              |              |              |
| Cell Chemistry                          |                | LiFePO <sub>4</sub>                   |              |              |              |              |              |
| Module model                            |                | GB-L-Pack5.76-C3                      |              |              |              |              |              |
| Module Energy (kWh)                     |                | 5.76                                  |              |              |              |              |              |
| Module Norminal Voltage (V)             |                | 57.6                                  |              |              |              |              |              |
| Module Capacity (Ah)                    |                | 100                                   |              |              |              |              |              |
| Battery Module Qty In Series (Optional) |                | 9                                     | 10           | 11           | 12           | 13           | 14           |
| System Nominal Voltage ( V )            |                | 518.4                                 | 576          | 633.6        | 691.2        | 748.8        | 806.4        |
| System Operating Voltage ( V )          |                | 405~591.3                             | 450~657      | 495~722.7    | 540~788.4    | 585~854.1    | 630~919.8    |
| System Normal Energy (kWh)              |                | 51.84                                 | 57.6         | 63.36        | 69.12        | 74.88        | 80.64        |
| Charge Current (A) <sup>[1]</sup>       | Max.Continuous | 75                                    |              |              |              |              |              |
|                                         | Peak           | 104(15s)                              |              |              |              |              |              |
| Discharge Current (A) <sup>[1]</sup>    | Max.Continuous | 75                                    |              |              |              |              |              |
|                                         | Peak           | 135(2min)                             |              |              |              |              |              |
| Other Parameters                        |                |                                       |              |              |              |              |              |
| Depth of Discharge                      |                | Recommended 80%, Max. adjustable 100% |              |              |              |              |              |
| Dimension ( W × D × H ) (mm)            |                | 610x385x1437                          | 610x385x1577 | 610x385x1717 | 610x385x1857 | 610x385x1997 | 610x385x2137 |
| Weight Approximate (kg)                 |                | 465                                   | 514          | 563          | 612          | 661          | 710          |
| Display                                 |                | LCD                                   |              |              |              |              |              |
| Communication Port                      |                | CAN2.0, RS485, Bluetooth              |              |              |              |              |              |
| Cycle Life <sup>[2]</sup>               |                | ≥6000                                 |              |              |              |              |              |
| Working Temperature Charge              |                | 0~55                                  |              |              |              |              |              |
| ( °C )                                  | Discharge      | -20 ~ 55                              |              |              |              |              |              |
| Warranty <sup>[3]</sup>                 |                | 5 years                               |              |              |              |              |              |
| Storage Temperature ( °C )              |                | 0 ~ 35                                |              |              |              |              |              |
| Fire Protection                         |                | Aerosol, Explosion venting            |              |              |              |              |              |
| Humidity                                |                | 5%-95% RH,Non-Condensing              |              |              |              |              |              |
| Altitude (m)                            |                | ≤3000                                 |              |              |              |              |              |
| IP Rating of Enclosure                  |                | IP66                                  |              |              |              |              |              |
| Scalability                             |                | Max.16 Modules in parallel            |              |              |              |              |              |
| Instalaton Location                     |                | Floor Mount                           |              |              |              |              |              |
| Type of Cooling                         |                | Natural Cooling                       |              |              |              |              |              |
| Certification                           |                | IEC 62619/UN38.3                      |              |              |              |              |              |

1. The current is affected by temperature and SOC.  
2. 25°C±2°C, 0.5C, 100%DOD, 70%EOL.  
3. Condintions apply, refer to Deye Warranty Letter.

GB-L Lite/Plus/Ultra (EU, AU, AS, AF, LATAM)

Technical Data



| Model                                   |                | GB-L17 Plus                                | GB-L23 Plus | GB-L28 Plus | GB-L34 Plus  | GB-L40 Plus  | GB-L46 Plus  |
|-----------------------------------------|----------------|--------------------------------------------|-------------|-------------|--------------|--------------|--------------|
| Main Parameters                         |                |                                            |             |             |              |              |              |
| Cell Chemistry                          |                | LiFePO <sub>4</sub>                        |             |             |              |              |              |
| Module model                            |                | GB-L-Pack5.76-A7                           |             |             |              |              |              |
| Module Energy (kWh)                     |                | 5.76                                       |             |             |              |              |              |
| Module Norminal Voltage (V)             |                | 57.6                                       |             |             |              |              |              |
| Module Capacity (Ah)                    |                | 100                                        |             |             |              |              |              |
| Battery Module Qty In Series (Optional) |                | 3                                          | 4           | 5           | 6            | 7            | 8            |
| System Nominal Voltage ( V )            |                | 172.8                                      | 230.4       | 288.0       | 345.6        | 403.2        | 460.8        |
| System Operating Voltage ( V )          |                | 135~197.1                                  | 180~262.8   | 225~328.5   | 270~394.2    | 315~459.9    | 360~525.6    |
| System Normal Energy (kWh)              |                | 17.28                                      | 23.04       | 28.8        | 34.56        | 40.32        | 46.08        |
| Charge Current (A) <sup>[1]</sup>       | Max.Continuous | 75                                         |             |             |              |              |              |
|                                         | Peak           | 104(15s)                                   |             |             |              |              |              |
| Discharge Current (A) <sup>[1]</sup>    | Max.Continuous | 75                                         |             |             |              |              |              |
|                                         | Peak           | 135(2min)                                  |             |             |              |              |              |
| Other Parameters                        |                |                                            |             |             |              |              |              |
| Depth of Discharge                      |                | 100%                                       |             |             |              |              |              |
| Dimension ( W × D × H ) (mm)            |                | 610x385x597                                | 610x385x737 | 610x385x877 | 610x385x1017 | 610x385x1157 | 610x385x1297 |
| Weight Approximate (kg)                 |                | 171                                        | 220         | 269         | 318          | 367          | 416          |
| Display                                 |                | LCD                                        |             |             |              |              |              |
| Communication Port                      |                | CAN2.0, RS485, Bluetooth                   |             |             |              |              |              |
| Cycle Life <sup>[2]</sup>               |                | ≥6000                                      |             |             |              |              |              |
| Working Temperature Charge              |                | 0~55                                       |             |             |              |              |              |
| ( °C )                                  | Discharge      | -20 ~ 55                                   |             |             |              |              |              |
| Warranty <sup>[3]</sup>                 |                | 10 years                                   |             |             |              |              |              |
| Storage Temperature ( °C )              |                | 0 ~ 35                                     |             |             |              |              |              |
| Fire Protection                         |                | Aerosol, Explosion venting                 |             |             |              |              |              |
| Humidity                                |                | 5%~95% RH,Non-Condensing                   |             |             |              |              |              |
| Altitude (m)                            |                | ≤3000                                      |             |             |              |              |              |
| IP Rating of Enclosure                  |                | IP66                                       |             |             |              |              |              |
| Scalability                             |                | Max.16 Modules in parallel                 |             |             |              |              |              |
| Instalaton Location                     |                | Floor Mount                                |             |             |              |              |              |
| Type of Cooling                         |                | Natural Cooling                            |             |             |              |              |              |
| Certification                           |                | IEC 62619/IEC 62040/VDE 2510-50/CEC/UN38.3 |             |             |              |              |              |

1. The current is affected by temperature and SOC.  
2. 25°C±2°C, 0.5C, 100%DOD, 70%EOL.  
3. Condintions apply, refer to Deye Warranty Letter.

| Model                                   |                | GB-L51 Plus                                | GB-L57 Plus  | GB-L63 Plus  | GB-L69 Plus  | GB-L74 Plus  | GB-L80 Plus  |
|-----------------------------------------|----------------|--------------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Main Parameters                         |                |                                            |              |              |              |              |              |
| Cell Chemistry                          |                | LiFePO <sub>4</sub>                        |              |              |              |              |              |
| Module model                            |                | GB-L-Pack5.76-A7                           |              |              |              |              |              |
| Module Energy (kWh)                     |                | 5.76                                       |              |              |              |              |              |
| Module Norminal Voltage (V)             |                | 57.6                                       |              |              |              |              |              |
| Module Capacity (Ah)                    |                | 100                                        |              |              |              |              |              |
| Battery Module Qty In Series (Optional) |                | 9                                          | 10           | 11           | 12           | 13           | 14           |
| System Nominal Voltage ( V )            |                | 518.4                                      | 576          | 633.6        | 691.2        | 748.8        | 806.4        |
| System Operating Voltage ( V )          |                | 405~591.3                                  | 450~657      | 495~722.7    | 540~788.4    | 585~854.1    | 630~919.8    |
| System Normal Energy (kWh)              |                | 51.84                                      | 57.6         | 63.36        | 69.12        | 74.88        | 80.64        |
| Charge Current (A) <sup>[1]</sup>       | Max.Continuous | 75                                         |              |              |              |              |              |
|                                         | Peak           | 104(15s)                                   |              |              |              |              |              |
| Discharge Current (A) <sup>[1]</sup>    | Max.Continuous | 75                                         |              |              |              |              |              |
|                                         | Peak           | 135(2min)                                  |              |              |              |              |              |
| Other Parameters                        |                |                                            |              |              |              |              |              |
| Depth of Discharge                      |                | 100%                                       |              |              |              |              |              |
| Dimension ( W × D × H ) (mm)            |                | 610x385x1437                               | 610x385x1577 | 610x385x1717 | 610x385x1857 | 610x385x1997 | 610x385x2137 |
| Weight Approximate (kg)                 |                | 465                                        | 514          | 563          | 612          | 661          | 710          |
| Display                                 |                | LCD                                        |              |              |              |              |              |
| Communication Port                      |                | CAN2.0, RS485, Bluetooth                   |              |              |              |              |              |
| Cycle Life <sup>[2]</sup>               |                | ≥6000                                      |              |              |              |              |              |
| Working Temperature Charge              |                | 0~55                                       |              |              |              |              |              |
| ( °C )                                  | Discharge      | -20 ~ 55                                   |              |              |              |              |              |
| Warranty <sup>[3]</sup>                 |                | 10 years                                   |              |              |              |              |              |
| Storage Temperature ( °C )              |                | 0 ~ 35                                     |              |              |              |              |              |
| Fire Protection                         |                | Aerosol, Explosion venting                 |              |              |              |              |              |
| Humidity                                |                | 5%-95% RH,Non-Condensing                   |              |              |              |              |              |
| Altitude (m)                            |                | ≤3000                                      |              |              |              |              |              |
| IP Rating of Enclosure                  |                | IP66                                       |              |              |              |              |              |
| Scalability                             |                | Max.16 Modules in parallel                 |              |              |              |              |              |
| Instalaton Location                     |                | Floor Mount                                |              |              |              |              |              |
| Type of Cooling                         |                | Natural Cooling                            |              |              |              |              |              |
| Certification                           |                | IEC 62619/IEC 62040/VDE 2510-50/CEC/UN38.3 |              |              |              |              |              |

1. The current is affected by temperature and SOC.  
2. 25°C±2°C, 0.5C, 100%DOD, 70%EOL.  
3. Condintions apply, refer to Deye Warranty Letter.

GB-L Lite/Plus/Ultra (EU, AU, AS, AF, LATAM)

Technical Data



| Model                                   |                | GB-L17 Ultra                               | GB-L23 Ultra | GB-L28 Ultra | GB-L34 Ultra | GB-L40 Ultra | GB-L46 Ultra |
|-----------------------------------------|----------------|--------------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Main Parameters                         |                |                                            |              |              |              |              |              |
| Cell Chemistry                          |                | LiFePO <sub>4</sub>                        |              |              |              |              |              |
| Module model                            |                | GB-L-Pack5.76-H7                           |              |              |              |              |              |
| Module Energy (kWh)                     |                | 5.76                                       |              |              |              |              |              |
| Module Norminal Voltage (V)             |                | 57.6                                       |              |              |              |              |              |
| Module Capacity (Ah)                    |                | 100                                        |              |              |              |              |              |
| Battery Module Qty In Series (Optional) |                | 3                                          | 4            | 5            | 6            | 7            | 8            |
| System Nominal Voltage ( V )            |                | 172.8                                      | 230.4        | 288.0        | 345.6        | 403.2        | 460.8        |
| System Operating Voltage ( V )          |                | 135~197.1                                  | 180~262.8    | 225~328.5    | 270~394.2    | 315~459.9    | 360~525.6    |
| System Normal Energy (kWh)              |                | 17.28                                      | 23.04        | 28.8         | 34.56        | 40.32        | 46.08        |
| Charge Current (A) <sup>[1]</sup>       | Max.Continuous | 75                                         |              |              |              |              |              |
|                                         | Peak           | 104(15s)                                   |              |              |              |              |              |
| Discharge Current (A) <sup>[1]</sup>    | Max.Continuous | 75                                         |              |              |              |              |              |
|                                         | Peak           | 135(2min)                                  |              |              |              |              |              |
| Other Parameters                        |                |                                            |              |              |              |              |              |
| Depth of Discharge                      |                | 100%                                       |              |              |              |              |              |
| Dimension ( W × D × H ) (mm)            |                | 610x385x597                                | 610x385x737  | 610x385x877  | 610x385x1017 | 610x385x1157 | 610x385x1297 |
| Weight Approximate (kg)                 |                | 171                                        | 220          | 269          | 318          | 367          | 416          |
| Display                                 |                | LCD                                        |              |              |              |              |              |
| Communication Port                      |                | CAN2.0, RS485, Bluetooth                   |              |              |              |              |              |
| Cycle Life <sup>[2]</sup>               |                | ≥6000                                      |              |              |              |              |              |
| Working Temperature ( °C )              | Charge         | -20~55 (Heating On)                        |              |              |              |              |              |
|                                         | Discharge      | -20 ~ 55                                   |              |              |              |              |              |
| Warranty <sup>[3]</sup>                 |                | 10 years                                   |              |              |              |              |              |
| Storage Temperature ( °C )              |                | 0 ~ 35                                     |              |              |              |              |              |
| Fire Protection                         |                | Aerosol, Explosion venting                 |              |              |              |              |              |
| Humidity                                |                | 5%~95% RH,Non-Condensing                   |              |              |              |              |              |
| Altitude (m)                            |                | ≤3000                                      |              |              |              |              |              |
| IP Rating of Enclosure                  |                | IP66                                       |              |              |              |              |              |
| Scalability                             |                | Max.16 Modules in parallel                 |              |              |              |              |              |
| Instalaton Location                     |                | Floor Mount                                |              |              |              |              |              |
| Type of Cooling                         |                | Natural Cooling                            |              |              |              |              |              |
| Certification                           |                | IEC 62619/IEC 62040/VDE 2510-50/CEC/UN38.3 |              |              |              |              |              |

1. The current is affected by temperature and SOC.  
2. 25°C±2°C, 0.5C, 100%DOD, 70%EOL.  
3. Condintions apply, refer to Deye Warranty Letter.

| Model                                   |                | GB-L51 Ultra                               | GB-L57 Ultra | GB-L63 Ultra | GB-L69 Ultra | GB-L74 Ultra | GB-L80 Ultra |
|-----------------------------------------|----------------|--------------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Main Parameters                         |                |                                            |              |              |              |              |              |
| Cell Chemistry                          |                | LiFePO <sub>4</sub>                        |              |              |              |              |              |
| Module model                            |                | GB-L-Pack5.76-H7                           |              |              |              |              |              |
| Module Energy (kWh)                     |                | 5.76                                       |              |              |              |              |              |
| Module Norminal Voltage (V)             |                | 57.6                                       |              |              |              |              |              |
| Module Capacity (Ah)                    |                | 100                                        |              |              |              |              |              |
| Battery Module Qty In Series (Optional) |                | 9                                          | 10           | 11           | 12           | 13           | 14           |
| System Nominal Voltage ( V )            |                | 518.4                                      | 576          | 633.6        | 691.2        | 748.8        | 806.4        |
| System Operating Voltage ( V )          |                | 405~591.3                                  | 450~657      | 495~722.7    | 540~788.4    | 585~854.1    | 630~919.8    |
| System Normal Energy (kWh)              |                | 51.84                                      | 57.6         | 63.36        | 69.12        | 74.88        | 80.64        |
| Charge Current (A) <sup>[1]</sup>       | Max.Continuous | 75                                         |              |              |              |              |              |
|                                         | Peak           | 104(15s)                                   |              |              |              |              |              |
| Discharge Current (A) <sup>[1]</sup>    | Max.Continuous | 75                                         |              |              |              |              |              |
|                                         | Peak           | 135(2min)                                  |              |              |              |              |              |
| Other Parameters                        |                |                                            |              |              |              |              |              |
| Depth of Discharge                      |                | 100%                                       |              |              |              |              |              |
| Dimension ( W × D × H ) (mm)            |                | 610x385x1437                               | 610x385x1577 | 610x385x1717 | 610x385x1857 | 610x385x1997 | 610x385x2137 |
| Weight Approximate (kg)                 |                | 465                                        | 514          | 563          | 612          | 661          | 710          |
| Display                                 |                | LCD                                        |              |              |              |              |              |
| Communication Port                      |                | CAN2.0, RS485, Bluetooth                   |              |              |              |              |              |
| Cycle Life <sup>[2]</sup>               |                | ≥6000                                      |              |              |              |              |              |
| Working Temperature Charge              |                | -20~55 (Heating On)                        |              |              |              |              |              |
| ( °C )                                  | Discharge      | -20 ~ 55                                   |              |              |              |              |              |
| Warranty <sup>[3]</sup>                 |                | 10 years                                   |              |              |              |              |              |
| Storage Temperature ( °C )              |                | 0 ~ 35                                     |              |              |              |              |              |
| Fire Protection                         |                | Aerosol, Explosion venting                 |              |              |              |              |              |
| Humidity                                |                | 5%-95% RH,Non-Condensing                   |              |              |              |              |              |
| Altitude (m)                            |                | ≤3000                                      |              |              |              |              |              |
| IP Rating of Enclosure                  |                | IP66                                       |              |              |              |              |              |
| Scalability                             |                | Max.16 Modules in parallel                 |              |              |              |              |              |
| Instalaton Location                     |                | Floor Mount                                |              |              |              |              |              |
| Type of Cooling                         |                | Natural Cooling                            |              |              |              |              |              |
| Certification                           |                | IEC 62619/IEC 62040/VDE 2510-50/CEC/UN38.3 |              |              |              |              |              |

1. The current is affected by temperature and SOC.  
2. 25°C±2°C, 0.5C, 100%DOD, 70%EOL.  
3. Condintions apply, refer to Deye Warranty Letter.



Summer Series  
Residential ESS Solution

Stacked Battery(HV)



High-voltage Stack Design

- Cable-free high-voltage stacking delivers higher efficiency and easier installation.



Built for Durability

- IP65 protection, ≥C2 anti-corrosion design deliver long-term durability



Wide Temperature Operation

- Low-temperature battery cell enables reliable performance in environments below -20°C.



All-Round Safety

- Built in explosion relief device to dredge gas, and built in fire protection device to cut off the fire source within 3 seconds.



Thermal Management

- Intelligent temperature sensing across core components ensures stable, reliable performance.



Smart & Visible Management

- Real-time alerts, remote upgrades, and an intuitive LCD interface keep the system always under control.

GB-L Pro (EU, AU)

Technical Data

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Main Parameters

| Model                                              | GB-L8-Pro           | GB-L12-Pro | GB-L16-Pro | GB-L20-Pro | GB-L24-Pro |
|----------------------------------------------------|---------------------|------------|------------|------------|------------|
| Cell chemistry                                     | LiFePO <sub>4</sub> |            |            |            |            |
| Module model                                       | GB-L-Pro-Pack4.1-2  |            |            |            |            |
| Module Energy ( kWh )                              | 4                   |            |            |            |            |
| Module Nominal Voltage ( V )                       | 102.4               |            |            |            |            |
| Module Capacity ( Ah )                             | 40                  |            |            |            |            |
| Battery Module Qty in Series ( Optional )          | 2                   | 3          | 4          | 5          | 6          |
| System Nominal Voltage ( V )                       | 204.8               | 307.2      | 409.6      | 512        | 614.4      |
| System operating Voltage ( V )                     | 166.4-700.8         |            |            |            |            |
| System Energy ( kWh )                              | 8                   | 12         | 16         | 20         | 24         |
| System Usable Energy ( kWh )                       | 7.2                 | 10.8       | 14.4       | 18         | 21.6       |
| Charge / Discharge<br>Current ( A ) <sup>[2]</sup> | Recommend           | 20         |            |            |            |
|                                                    | Max.                | 40         |            |            |            |
|                                                    | Peak ( 25°C )       | 50         |            |            |            |

Other Parameters

|                              |                                       |             |             |             |             |
|------------------------------|---------------------------------------|-------------|-------------|-------------|-------------|
| Working Temperature ( °C )   | Charge : -20~55 / Discharge: -20~55   |             |             |             |             |
| LCD Display                  | SOC, Power, Total Voltage             |             |             |             |             |
| Communication Port           | CAN2.0,RS485                          |             |             |             |             |
| Humidity                     | 5%-90%                                |             |             |             |             |
| Altitude                     | ≤2000m                                |             |             |             |             |
| IP Rating of Enclosure       | IP65                                  |             |             |             |             |
| Storage Temperature ( °C )   | 0~35                                  |             |             |             |             |
| Dimension ( W × H × D, mm )  | 540 × 385 ×                           | 540 × 385 × | 540 × 385 × | 540 × 385 × | 540 × 385 × |
|                              | 650                                   | 870         | 1090        | 1310        | 1530        |
| Weight ( kg )                | 97                                    | 136         | 175         | 214         | 253         |
| Installation Location        | Floor-Mounted                         |             |             |             |             |
| Recommend Depth of Discharge | 90%                                   |             |             |             |             |
| Cycle Life                   | 25+2°C,0.5C/0.5C,EOL70%≥6000          |             |             |             |             |
| Warranty Period              | 10 years                              |             |             |             |             |
| Certification                | CE / IEC 62619 / VDE 2510-50 / UN38.3 |             |             |             |             |

1. DC Usable Energy, test conditions : 90% DOD, 0.3C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.
2. The current is affected by temperature and SOC.
3. The warranty is due whichever reached first of warranty period or life cycle power.

Summer Series  
Residential ESS Solution

All-in-One ESS(HV)



GB-SL Pro (EU)



Exceptional Performance

- All-in-One design
- Beautiful appearance and scene integration
- 100% unbalanced output, each phase
- Max. output up to 60% rated power



Enhanced Reliability

- ≥6000 Cycles, 70%EOL
- Wide temperature range: -20°C ~ 60°C
- IP65-rated for indoor and outdoor use
- Support storing energy from diesel generator



Smarter

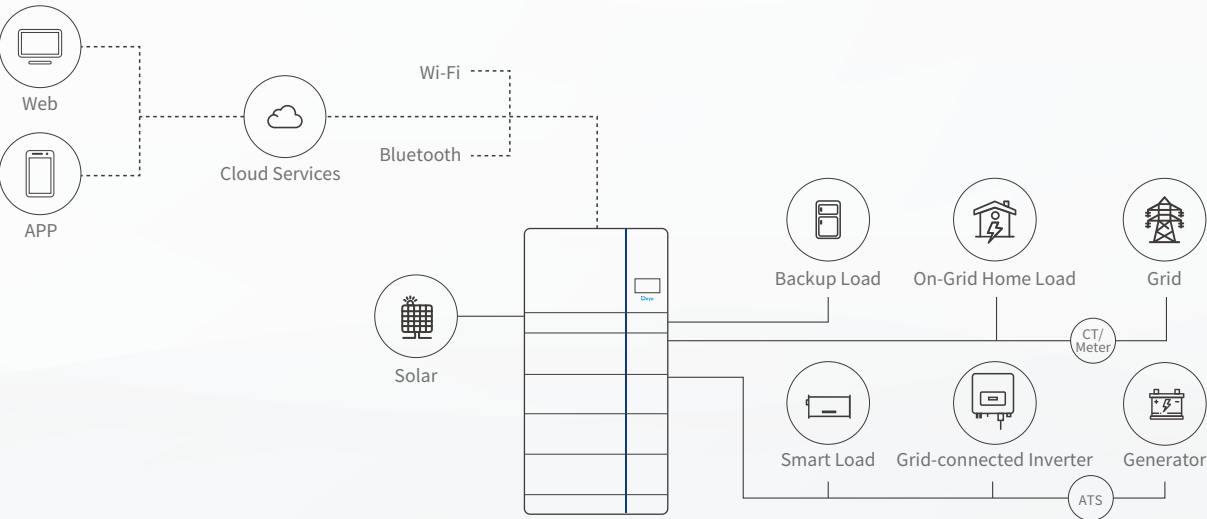
- Temperature detection of key parts, cell, power plug-in, etc.
- Optional heating function for low-temperature applications



More Flexible

- Max. 10 pcs parallel for on-grid and off-grid operation
- Modules are connected in series without cable connection, and high-voltage platform improves system efficiency

System Application Topology Diagram



\*Floor-Mounted

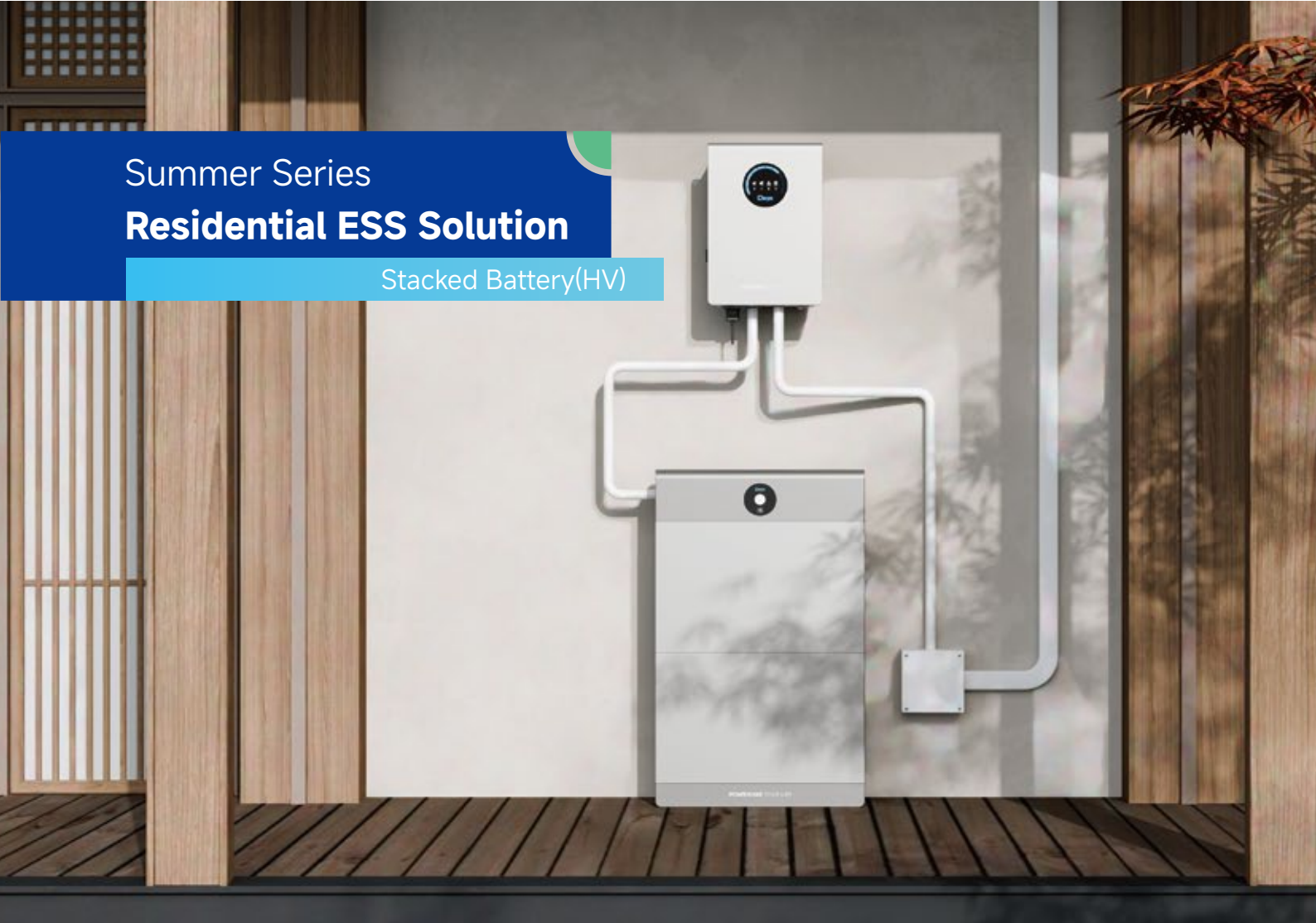
GB-SL Pro (EU)

Technical Data



| Battery Technical Specification                    |               |                                                                                                                                                                                                                                                     |               |             |             |             |             |
|----------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------|-------------|-------------|-------------|
| Battery Model                                      |               | GB-L-Pro-Pack-4.1-2                                                                                                                                                                                                                                 |               |             |             |             |             |
| Main Parameters                                    |               |                                                                                                                                                                                                                                                     |               |             |             |             |             |
| Battery Type                                       |               | LiFePO <sub>4</sub>                                                                                                                                                                                                                                 |               |             |             |             |             |
| Battery Module Energy ( kWh )                      |               | 4                                                                                                                                                                                                                                                   |               |             |             |             |             |
| Battery Module Nominal Voltage ( V )               |               | 102.4                                                                                                                                                                                                                                               |               |             |             |             |             |
| Battery Module Capacity ( Ah )                     |               | 40                                                                                                                                                                                                                                                  |               |             |             |             |             |
| Battery Module Qty in Series ( Optional )          |               | 2                                                                                                                                                                                                                                                   | 3             | 4           | 5           | 6           |             |
| Scalability                                        |               | 204.8                                                                                                                                                                                                                                               | 307.2         | 409.6       | 512         | 614.4       |             |
| System Operating Voltage ( V )                     |               | 166.4-700.8                                                                                                                                                                                                                                         |               |             |             |             |             |
| System Energy ( kWh )                              |               | 8                                                                                                                                                                                                                                                   | 12            | 16          | 20          | 24          |             |
| System Usable Energy ( kWh )                       |               | 7.2                                                                                                                                                                                                                                                 | 10.8          | 14.4        | 18          | 21.6        |             |
| Charge / Discharge<br>Current ( A ) <sup>[2]</sup> | Recommend     | 20                                                                                                                                                                                                                                                  |               |             |             |             |             |
|                                                    | Max.          | 40                                                                                                                                                                                                                                                  |               |             |             |             |             |
|                                                    | Peak ( 25°C ) | 50@2min                                                                                                                                                                                                                                             |               |             |             |             |             |
| Other Parameters                                   |               |                                                                                                                                                                                                                                                     |               |             |             |             |             |
| Operating Temperature ( °C )                       |               | Charge : -20~55 / Discharge : -20~55                                                                                                                                                                                                                |               |             |             |             |             |
| Thermal Management                                 |               | Natural Cooling                                                                                                                                                                                                                                     |               |             |             |             |             |
| Communication Port                                 |               | CAN2.0 / RS485                                                                                                                                                                                                                                      |               |             |             |             |             |
| Humidity                                           |               | 5 ~ 85%RH                                                                                                                                                                                                                                           |               |             |             |             |             |
| Altitude                                           |               | ≤ 2000                                                                                                                                                                                                                                              |               |             |             |             |             |
| IP Rating of Enclosure                             |               | IP65                                                                                                                                                                                                                                                |               |             |             |             |             |
| Noise ( dB )                                       |               | < 55                                                                                                                                                                                                                                                |               |             |             |             |             |
| Module Dimension ( W × H × D, mm )                 | 540 × 385 ×   | 540 × 385 ×                                                                                                                                                                                                                                         | 540 × 385 ×   | 540 × 385 × | 540 × 385 × |             |             |
|                                                    | 1100          | 1320                                                                                                                                                                                                                                                | 1540          | 1760        | 1980        |             |             |
| Module Weight Approximate ( kg )                   |               | 137                                                                                                                                                                                                                                                 | 176           | 215         | 254         | 293         |             |
| Installation Location                              |               | Floor-Mounted                                                                                                                                                                                                                                       |               |             |             |             |             |
| Recommend Depth of Discharge                       |               | 90%                                                                                                                                                                                                                                                 |               |             |             |             |             |
| Cycle Life                                         |               | 25 ±2°C, 0.5C / 0.5C, 70%EOL ≥ 6000                                                                                                                                                                                                                 |               |             |             |             |             |
| Warranty Period                                    |               | 10 years                                                                                                                                                                                                                                            |               |             |             |             |             |
| Certification                                      |               | CE / IEC 62619 / VDE 2510-50 / UN38.3                                                                                                                                                                                                               |               |             |             |             |             |
| Inverter Technical Specification                   |               |                                                                                                                                                                                                                                                     |               |             |             |             |             |
| Inverter Model                                     | GB-S 5K-EU    | GB-S 6K-EU                                                                                                                                                                                                                                          | GB-S 8K-EU    | GB-S 10K-EU | GB-S 12K-EU | GB-S 15K-EU | GB-S 20K-EU |
| Efficiency                                         |               |                                                                                                                                                                                                                                                     |               |             |             |             |             |
| Max. Efficiency                                    |               |                                                                                                                                                                                                                                                     |               | 97.6%       |             |             |             |
| Euro Efficiency                                    |               |                                                                                                                                                                                                                                                     |               | 97%         |             |             |             |
| MPPT Efficiency                                    |               |                                                                                                                                                                                                                                                     |               | 99%         |             |             |             |
| Protection                                         |               |                                                                                                                                                                                                                                                     |               |             |             |             |             |
| Integrated                                         |               | PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge protection |               |             |             |             |             |
| Output Over Voltage Protection                     |               | DC Type II / AC Type III                                                                                                                                                                                                                            |               |             |             |             |             |
| Certifications and standards                       |               | CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98                                                                                                                                                                                    |               |             |             |             |             |
| Grid Regulation                                    |               | VDE 0126-1-1, RD 1699, C10-11                                                                                                                                                                                                                       |               |             |             |             |             |
| Safety EMC /standard                               |               | IEC / EN 61000-6-1 / 2 / 3 / 4, IEC / EN 62109-1, IEC / EN 62109-2                                                                                                                                                                                  |               |             |             |             |             |
| General Data                                       |               |                                                                                                                                                                                                                                                     |               |             |             |             |             |
| Operating Temperature Range (°C)                   |               | -40 ~ 60°C, >45°C derating                                                                                                                                                                                                                          |               |             |             |             |             |
| Cooling                                            |               | Free cooling                                                                                                                                                                                                                                        | Smart cooling |             |             |             |             |
| Communication With BMS                             |               | RS485; CAN                                                                                                                                                                                                                                          |               |             |             |             |             |
| Warranty Period                                    |               | 5 years                                                                                                                                                                                                                                             |               |             |             |             |             |

| Inverter Technical Specification                       |            |                |                |                                                |                               |                  |                  |
|--------------------------------------------------------|------------|----------------|----------------|------------------------------------------------|-------------------------------|------------------|------------------|
| Inverter Model                                         | GB-S 5K-EU | GB-S 6K-EU     | GB-S 8K-EU     | GB-S 10K-EU                                    | GB-S 12K-EU                   | GB-S 15K-EU      | GB-S 20K-EU      |
| Main Parameters                                        |            |                |                |                                                |                               |                  |                  |
| Battery Type                                           |            |                |                | LI-ION                                         |                               |                  |                  |
| Battery Voltage Range ( V )                            |            |                |                | 160 ~ 700                                      |                               |                  |                  |
| Max. Charging Current ( A )                            |            | 30             | 37             |                                                |                               |                  |                  |
| Max. Discharging Current ( A )                         |            | 30             | 37             |                                                |                               |                  |                  |
| Number of Battery Input                                |            |                |                | 1                                              |                               |                  |                  |
| Charging Strategy for Li-Ion Battery                   |            |                |                | Self-adaption to BMS                           |                               |                  |                  |
| PV String Input Data                                   |            |                |                |                                                |                               |                  |                  |
| Start Up Dc Voltage ( Vdc )                            |            |                |                | 150                                            |                               |                  |                  |
| Max. DC input Power ( W )                              |            | 6500           | 7800           | 10400                                          | 13000                         | 15600            | 26000            |
| Max. Dc Input Voltage ( V )                            |            |                |                | 1000                                           |                               |                  |                  |
| MPPT Range ( V )                                       |            |                |                | 150~850                                        |                               |                  |                  |
| Full Load Dc Voltage Range ( V )                       |            | 195~850        | 195~850        | 260~850                                        | 325~850                       | 340~850          | 500~850          |
| Rated Dc Input Voltage ( V )                           |            |                |                | 600                                            |                               |                  |                  |
| PV Input Current ( A )                                 |            |                | 20+20          |                                                | 26+20                         |                  | 26+26            |
| Max.PV ISC ( A )                                       |            |                | 30+30          |                                                | 39+30                         |                  | 39+39            |
| Number of MPP Trackers                                 |            |                |                | 2                                              |                               |                  |                  |
| Number of Strings Per MPP Tracker                      |            |                | 1+1            |                                                | 2+1                           |                  | 2+2              |
| AC Output Data                                         |            |                |                |                                                |                               |                  |                  |
| Rated Ac Output and UPs Power ( W )                    |            | 5000           | 6000           | 8000                                           | 10000                         | 12000            | 20000            |
| Max. Ac Output Power ( W )                             |            | 5500           | 6600           | 8800                                           | 11000                         | 13200            | 22000            |
| AC Output Rated Current ( A )                          |            | 7.6 / 7.3      | 9.1 / 8.7      | 12.2 / 11.6                                    | 15.2 / 14.5                   | 18.2 / 17.4      | 30.4 / 29        |
| Max. Ac Output ( off-gird ) Current ( A )              |            | 8.4 / 8        | 10 / 9.6       | 13.4 / 12.8                                    | 16.7 / 16                     | 20 / 19.2        | 33.4 / 31.9      |
| Max. Three-phase Unbalanced output Current ( A )       |            | 13             | 13             | 18                                             | 22                            | 25               | 35               |
| Max. Continuous AC Pass Through ( A )                  |            |                |                |                                                | 40                            |                  |                  |
| Peak Power ( off grid )                                |            |                |                |                                                | 1.5 times of rated power, 10s |                  |                  |
| Generator input / Smart Load / AC Couple Current ( A ) |            | 7.6 / 40 / 7.6 | 9.1 / 40 / 9.1 | 12.2 / 40 / 12.2                               | 15.2 / 40 / 15.2              | 18.2 / 80 / 18.2 | 30.4 / 80 / 30.4 |
| Power Factor                                           |            |                |                | 0.8 leading to 0.8 lagging                     |                               |                  |                  |
| Output Frequency and Voltage                           |            |                |                | 50 / 60Hz; 3L / N / PE 220 / 380, 230 / 400Vac |                               |                  |                  |
| Grid Type                                              |            |                |                | Three Phase                                    |                               |                  |                  |
| DC Injection Current ( mA )                            |            |                |                | <0.5%In                                        |                               |                  |                  |



Summer Series  
Residential ESS Solution

Stacked Battery(HV)



Self-Sufficient and  
Grid-Connected Operation

- Seamlessly switch between self-sufficient power and grid power.



Backflow Prevention

- Equipped with backflow prevention measures to protect the grid.



Single-Function and  
Full Load Support

- Can handle both single appliances and full household loads.



101V/202V Load Support

- Compatible with both 101V and 202V electrical systems.

GB-A (JP)

Technical Data



Main Parameters

| Model                              | GB-A4           |  | GB-A10                                                             | GB-A16           |
|------------------------------------|-----------------|--|--------------------------------------------------------------------|------------------|
| Cell chemistry                     |                 |  | LiFePO <sub>4</sub>                                                |                  |
| Module Energy ( kWh )              |                 |  | 2                                                                  |                  |
| Module Nominal Voltage ( V )       |                 |  | 51.2                                                               |                  |
| Module Capacity ( Ah )             |                 |  | 39.1                                                               |                  |
| System Nominal Voltage ( V )       | 102.4           |  | 256                                                                | 409.6            |
| System Energy ( kWh )              | 4               |  | 10                                                                 | 16               |
| Charge Power (kW)                  | 2.5             |  | 6.25                                                               | 10               |
| Discharge power (kW)               | 3.3             |  | 8.2                                                                | 10               |
| Max.charge current ( A )           |                 |  | 28                                                                 |                  |
| Discharge Current ( A )            | Recommend       |  | 30                                                                 |                  |
|                                    | Max.            |  | 37                                                                 |                  |
| Ambient operating Temperature (°C) |                 |  | Charge/Discharge: -15~55                                           |                  |
| Status Indicator                   |                 |  | Yellow: Battery High Voltage Power On<br>Red: Battery System Alarm |                  |
| Communication Port                 |                 |  | CAN2.0/ RS485                                                      |                  |
| Humidity                           |                 |  | 5%-95%RH                                                           |                  |
| Altitude                           |                 |  | 3000m                                                              |                  |
| IP Rating of Enclosure             |                 |  | IP65                                                               |                  |
| Dimension (W/D/H,mm)               | 700 × 200 × 695 |  | 700 × 200 × 1135                                                   | 700 × 200 × 1575 |
| Weight Approximate (kg)            | 59              |  | 116                                                                | 173              |
| Installation Location              |                 |  | Wall-Mounted/Floor-Mounted                                         |                  |
| Recommend storage Temperature (°C) |                 |  | 0~35                                                               |                  |
| Recommend Depth of Discharge       |                 |  | 90%                                                                |                  |
| Cycle Life                         |                 |  | 25±2°C,0.5C/0.5C, EOL70%≥6000                                      |                  |
| Warranty                           |                 |  | 10 years                                                           |                  |
| Certification                      |                 |  | JET                                                                |                  |

Summer Series  
Indoor C&I ESS Solution

Stacked Battery(HV)

NEW ORION W



User-friendly Structural Design

- Cable-free stackable design enables fast, tool-free installation
- Millimeter-grade filtered airflow ensures efficient dust removal
- Detachable maintenance cover allows direct on-cluster service



Wide Compatibility

- Advanced cluster-level, pack-level, and cell-level balancing algorithms ensure seamless battery replacement and parallel operation.
- Compatible with 30-125 kW power units



Intelligent Thermal Management

- Independent fan control at pack level
- Optimized airflow design keeps cell temperature difference within 4 °C



High Power Output

- 230A continuous charge/discharge for high-load and fast-charge scenarios



Flexible Expansion

- Modular design, scalable from 5~16 packs (60-192 kWh) per cluster.
- Up to 16 clusters in parallel, reaching 3MWh



Robust Protection

- C4 anti-corrosion coating ensures superior environmental resistance

GB-W (EU, AS, AF, LATAM)

Technical Data

|       |  |
|-------|--|
| Days  |  |
| ..... |  |
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Main Parameters

|                                             |  |                                |                 |                 |                 |                     |             |                 |                 |                 |                 |             |                 |
|---------------------------------------------|--|--------------------------------|-----------------|-----------------|-----------------|---------------------|-------------|-----------------|-----------------|-----------------|-----------------|-------------|-----------------|
| Cell Chemistry                              |  |                                |                 |                 |                 | LiFePO <sub>4</sub> |             |                 |                 |                 |                 |             |                 |
| Module Energy (kWh)                         |  |                                |                 |                 |                 | 12.03               |             |                 |                 |                 |                 |             |                 |
| Module Capacity (Ah)                        |  |                                |                 |                 |                 | 235                 |             |                 |                 |                 |                 |             |                 |
| Nominal Voltage (V)                         |  |                                |                 |                 |                 | 51.2                |             |                 |                 |                 |                 |             |                 |
| Battery Module Qty in series (Optional)     |  | 5                              | 6               | 7               | 8               | 9                   | 10          | 11              | 12              | 13              | 14              | 15          | 16              |
| Battery Model Number                        |  | GB-W60                         | GB-W72          | GB-W84          | GB-W96          | GB-W108             | GB-W120     | GB-W132         | GB-W144         | GB-W156         | GB-W168         | GB-W180     | GB-W192         |
| System Nominal Voltage (Vdc)                |  | 256                            | 307.2           | 358.4           | 409.6           | 460.8               | 512         | 563.2           | 614.4           | 665.6           | 716.8           | 768         | 819.2           |
| System Operating Voltage (Vdc)              |  | 208<br>~292                    | 249.6<br>~350.4 | 291.2<br>~408.8 | 332.8<br>~467.2 | 374.4<br>~525.6     | 416<br>~584 | 457.6<br>~642.4 | 499.2<br>~700.8 | 540.8<br>~759.2 | 582.4<br>~817.6 | 624<br>~876 | 665.6<br>~934.4 |
| System Energy (kWh)                         |  | 60.1                           | 72.1            | 82.4            | 96.2            | 108.2               | 120.3       | 132.3           | 144.3           | 156.4           | 168.4           | 180.4       | 192.5           |
| System Nomianal Charge/Discharge Power (kW) |  | 58.8                           | 70.6            | 82.4            | 94.2            | 105.9               | 117.7       | 129.5           | 141.3           | 153             | 164.8           | 176.6       | 188.4           |
| Charge / Discharge                          |  | 230                            |                 |                 |                 |                     |             |                 |                 |                 |                 |             |                 |
| Current                                     |  | 322 (1s)                       |                 |                 |                 |                     |             |                 |                 |                 |                 |             |                 |
| Working Temperature (°C)                    |  | Charge:0~55 / Discharge:-20~55 |                 |                 |                 |                     |             |                 |                 |                 |                 |             |                 |
| Communication Port                          |  | CAN / RS485                    |                 |                 |                 |                     |             |                 |                 |                 |                 |             |                 |
| Thermal Management                          |  | Natural air cooling            |                 |                 |                 |                     |             |                 |                 |                 |                 |             |                 |
| Recommend Depth of Discharge                |  | 95%                            |                 |                 |                 |                     |             |                 |                 |                 |                 |             |                 |
| Cycle Life                                  |  | 25±2°C,0.5C/0.5C,70%EOL≥6000   |                 |                 |                 |                     |             |                 |                 |                 |                 |             |                 |
| Warranty                                    |  | 10 years                       |                 |                 |                 |                     |             |                 |                 |                 |                 |             |                 |

Other Parameters

|                          |              |
|--------------------------|--------------|
| Humidity                 | 0~85%        |
| Altitude (m)             | ≤3000        |
| IP Rating of Enclosure   | IP20         |
| Noise (dB)               | ≤60@25°C, 1m |
| Storage Temperature (°C) | -30~60       |
| Installation Location    | Floor Mount  |

|                                 |                                      |
|---------------------------------|--------------------------------------|
| Model                           | GB-W-PDU-2                           |
| Operating Voltage               | 200~1000Vdc                          |
| Nominal Charge/DischargeCurrent | 230A                                 |
| Operating Temperature           | -20~55°C                             |
| Ingress Protection              | IP20                                 |
| Details                         | 690 x 436 x 151.2(W x D x H), 20.8kg |

|                                   |                                  |
|-----------------------------------|----------------------------------|
| Model                             | GB-W-Pack12~2-A3                 |
| Nominal Capacity                  | 235Ah                            |
| Nominal Energy                    | 12.03kWh                         |
| Nominal Voltage                   | 51.2Vdc                          |
| Max Charge/Discharge Current      | 230A                             |
| Ingress Protection                | IP20                             |
| Operating Temperature (Charge)    | 0~55°C                           |
| Operating Temperature (Discharge) | -20~55°C                         |
| StorageTemperature                | -30~60°C                         |
| Details                           | 690 x 436 x 270(W x D x H), 93kg |

|         |                                 |
|---------|---------------------------------|
| Model   | GB-W-Base                       |
| Details | 690 x 436 x 117(W x D x H),14kg |

|         |                       |
|---------|-----------------------|
| Model   | Telescopic Slide Rail |
| Details | Stroke: 200~300 mm    |

|         |                                 |
|---------|---------------------------------|
| Model   | Top Cover                       |
| Details | 690 x 436 x 90 (W x D x H, 6kg) |

Summer Series  
Indoor C&I ESS Solution

Rack-Mounted Battery (HV)

ORION B



Intelligent Control

- Peak-valley mgmt, anti-backflow, overload protection
- Load tracking, demand control, backup power, phase separation



Scalable

- Support up to 16 units in parallel, maximum 2.3MW/4.1MWh



Reliable

- Operating temp : -20°C to 55°C
- Operate up to 3000m altitude
- 11x overload capacity
- Balancing solutions extend battery life
- Triple auxiliary power design for stable supply



Easy Maintenance

- 5U Standard Chassis
- User Interface & Bluetooth App
- USB & Cloud Upgrades
- TCP Protocol for EMS
- Fault Signal Input Support



Multi-Fusion

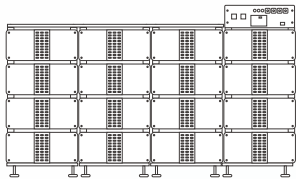
- Integrated EMS, PCS, and BMS
- Support expansion of MPPT module
- Support off-grid backup



Safer

- LFP batteries
- Support aerosol fire extinguishing

BOS-B Pro-A3 (EU, AS, AF, LATAM, AU)  
Technical Data



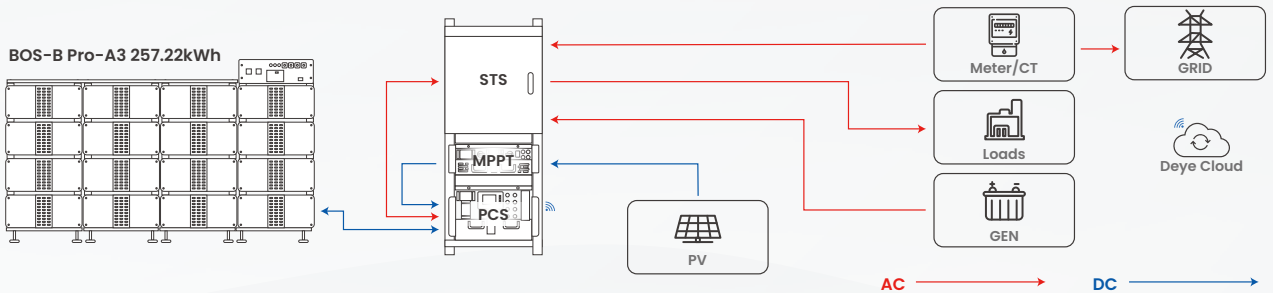
Main Parameters

|                                           |                        |                                                                                                                                                                                      |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|-------------------------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Battery Module Energy ( kWh )             | 16.08                  |                                                                                                                                                                                      |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Battery Module Nominal Voltage ( V )      | 51.2                   |                                                                                                                                                                                      |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Battery Module Capacity ( Ah )            | 314                    |                                                                                                                                                                                      |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Module Weight Approximate ( kg )          | 126                    |                                                                                                                                                                                      |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Battery Module Qty In Series ( Optional ) | 5-16                   |                                                                                                                                                                                      |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Matching Mode                             | PCS or Hybrid Inverter | 14-16 units for PCS on-grid applications, 15-16 units for PCS off-grid applications, 5-16 units for hybrid inverter systems                                                          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|                                           | PCS + MPPT             | 16 units (on/off-grid) for MPPT Open-Circuit Voltage ≤800V<br>15 units (on/off-grid) for MPPT Open-Circuit Voltage ≤ 750V<br>14 units (on-grid) for MPPT Open-Circuit Voltage ≤ 700V |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|                                           |                        |                                                                                                                                                                                      |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Battery Model Number                      | BOS-B80 Pro-A3         | BOS-B96 Pro-A3                                                                                                                                                                       | BOS-B112 Pro-A3 | BOS-B128 Pro-A3 | BOS-B144 Pro-A3 | BOS-B160 Pro-A3 | BOS-B176 Pro-A3 | BOS-B192 Pro-A3 | BOS-B208 Pro-A3 | BOS-B224 Pro-A3 | BOS-B240 Pro-A3 | BOS-B256 Pro-A3 |
| Battery Module Qty In Series (Optional)   | 5                      | 6                                                                                                                                                                                    | 7               | 8               | 9               | 10              | 11              | 12              | 13              | 14              | 15              | 16              |
| System Nominal Voltage (V)                | 256                    | 307.2                                                                                                                                                                                | 358.4           | 409.6           | 460.8           | 512             | 563.2           | 614.4           | 665.6           | 716.8           | 768             | 819.2           |
| System Operating Voltage (V)              | 208-292                | 249.6-350.4                                                                                                                                                                          | 291.2-408.8     | 332.8-467.2     | 374.4-525.6     | 416-584         | 457.6-642.4     | 499.2-700.8     | 540.8-759.2     | 582.4-817.6     | 624-876         | 665.6-934.4     |
| System Energy (kWh)                       | 80.3                   | 96.4                                                                                                                                                                                 | 112.5           | 128.6           | 144.6           | 160.7           | 176.8           | 192.9           | 208.9           | 225             | 241.1           | 257.2           |
| System Usable Energy (kWh)                | 72.27                  | 86.76                                                                                                                                                                                | 101.25          | 115.74          | 130.14          | 144.63          | 159.12          | 173.61          | 188.01          | 202.5           | 216.99          | 231.48          |
| Max DC Power(kW)                          | 46.08                  | 55.296                                                                                                                                                                               | 64.512          | 73.728          | 82.944          | 92.16           | 101.376         | 110.592         | 119.808         | 129.024         | 138.24          | 147.456         |
| Max.Charge/Discharge Current (A)          | 180                    |                                                                                                                                                                                      |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |

Other Parameters

|                                    |                                                                   |     |      |                   |      |      |      |                   |      |      |      |      |
|------------------------------------|-------------------------------------------------------------------|-----|------|-------------------|------|------|------|-------------------|------|------|------|------|
| Operating Temperature ( °C )       | Charge : 0 ~ 55    Discharge : -20 ~ 55                           |     |      |                   |      |      |      |                   |      |      |      |      |
| Storage Temperature ( °C )         | 0 ~ 35                                                            |     |      |                   |      |      |      |                   |      |      |      |      |
| Thermal Management                 | Smart fan cooling                                                 |     |      |                   |      |      |      |                   |      |      |      |      |
| LCD Display                        | SOC / Fault Code                                                  |     |      |                   |      |      |      |                   |      |      |      |      |
| Status Indicator                   | Yellow : Battery High Voltage Power On Red : Battery System Alarm |     |      |                   |      |      |      |                   |      |      |      |      |
| Communication Port                 | TCP / RS485 / CAN                                                 |     |      |                   |      |      |      |                   |      |      |      |      |
| Communication With BMS             | CAN                                                               |     |      |                   |      |      |      |                   |      |      |      |      |
| Humidity                           | 5% ~ 85%                                                          |     |      |                   |      |      |      |                   |      |      |      |      |
| Altitude                           | ≤3000m                                                            |     |      |                   |      |      |      |                   |      |      |      |      |
| IP Rating of Enclosure             | IP20                                                              |     |      |                   |      |      |      |                   |      |      |      |      |
| Noise ( dB )                       | TBD                                                               |     |      |                   |      |      |      |                   |      |      |      |      |
| System Dimension ( W × H × D, mm ) | 1067 × 1305 × 800                                                 |     |      | 1608 × 1305 × 800 |      |      |      | 2150 × 1305 × 800 |      |      |      |      |
| System Weight Approximate ( kg )   | 758                                                               | 884 | 1010 | 1136              | 1310 | 1436 | 1562 | 1688              | 1862 | 1988 | 2114 | 2240 |
| Installation Location              | Rack Mounted                                                      |     |      |                   |      |      |      |                   |      |      |      |      |
| Recommend Depth of Discharge       | 90%                                                               |     |      |                   |      |      |      |                   |      |      |      |      |
| Cycle Life                         | 25±2°C, 0.5C / 0.5C, EOL70%≥6000                                  |     |      |                   |      |      |      |                   |      |      |      |      |
| Warranty Period                    | 10 years                                                          |     |      |                   |      |      |      |                   |      |      |      |      |
| Certification                      | CE / IEC62619 / IEC62040 / UN38.3                                 |     |      |                   |      |      |      |                   |      |      |      |      |

Typical Application Scenario



Summer Series  
Small-Scale C&I ESS Solution

Rack-Mounted Battery (HV)



Safe and Reliable

- Intelligent BMS
- Firefighting module
- Dual electrode disconnection design
- Support up to 160A current output



Intelligent Control

- Protection against over-discharge, over-charge, over-current and extreme temperatures
- Automatically manage charge / discharge
- States and balances cell current voltage
- Uploading of battery data via TCP protocol



Flexible Expansion

- Support 7 ~ 21 packs
- Inverter 50 ~ 100kW, Battery 54 ~ 161kWh
- Easy capacity expansion and save more budget



Easy Installation

- 3U rack embedded design
- A concise data display interface
- Multiple battery modules can be in parallel for expanding
- Dual power output plugins, each supports 100A
- Connectable to two inverter DC interfaces
- USB, Bluetooth connection



Smart Operation

- Cloud-based monitoring
- Keep track of the operating status
- Intelligent strategy control
- Effectively saving on electricity bill

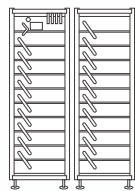


Long Service Life

- 10-year warranty
- 6000 cycles

BOS-A (NA, AS, AF, LATAM, EU)

Technical Data



Main Parameters

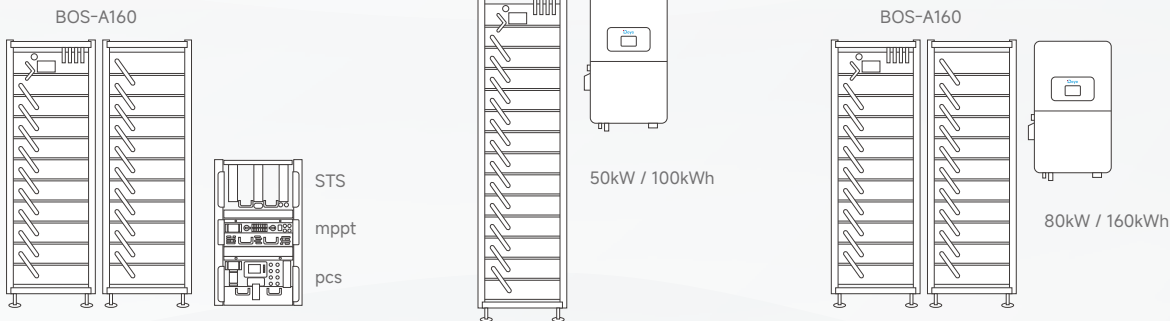
|                                           |                     |               |               |
|-------------------------------------------|---------------------|---------------|---------------|
| Cell Chemistry                            | LiFePO <sub>4</sub> |               |               |
| Module Energy ( kWh )                     | 7.68                |               |               |
| Module Nominal Voltage ( V )              | 38.4                |               |               |
| Module Capacity ( Ah )                    | 200                 |               |               |
| Module Dimension ( W × D × H, mm )        | 601.5 × 520 × 135   |               |               |
| Module Weight Approximate ( kg )          | 70                  |               |               |
| Battery Module Qty In Series ( Optional ) | 7                   | 13            | 21            |
| System Nominal Voltage ( V )              | 268.8               | 499.2         | 806.4         |
| System Operating Voltage ( V )            | 235.2 ~ 306.6       | 436.8 ~ 569.4 | 705.6 ~ 919.8 |
| System Energy ( kWh )                     | 53.76               | 99.84         | 161.28        |
| System Usable Energy ( kWh ) <sup>1</sup> | 48.38               | 89.85         | 145.15        |
| Charge / Discharge                        | Recommend           | 100           |               |
| Current ( A ) <sup>[2]</sup>              | Max.                | 160           |               |

Other Parameters

|                              |                                                                   |                  |                          |
|------------------------------|-------------------------------------------------------------------|------------------|--------------------------|
| Working Temperature ( °C )   | Charge : 0 ~ 55 / Discharge : -20 ~ 55                            |                  |                          |
| Status Indicator             | Yellow : Battery High Voltage Power On Red : Battery System Alarm |                  |                          |
| Communication Port           | CAN2.0                                                            |                  |                          |
| Humidity                     | 5% ~ 85%RH                                                        |                  |                          |
| Altitude                     | ≤3000m                                                            |                  |                          |
| IP Rating of Enclosure       | IP20                                                              |                  |                          |
| Dimension ( W × D × H, mm )  | 610 × 610 × 1900                                                  | 610 × 610 × 2350 | ( 610 × 610 × 1900 ) × 2 |
| Weight Approximate ( kg )    | 525                                                               | 934              | 1501                     |
| Installation Location        | Rack-Mounted                                                      |                  |                          |
| Storage Temperature ( °C )   | 0 ~ 35                                                            |                  |                          |
| Recommend Depth of Discharge | 90%                                                               |                  |                          |
| Cycle Life                   | ≥6000 ( 25±2°C, 0.5C / 0.5C, EOL70% )                             |                  |                          |
| Warranty Period              | 10 years                                                          |                  |                          |
| Certification                | CE / IEC 62619 / IEC 62040 / UN38.3 / VDE-2510                    |                  |                          |

- DC Usable Energy, test conditions : 90%DOD, 0.3C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.
- The current is affected by temperature and SOC.
- The warranty is due whichever reached first of warranty period or life cycle power.

| Backup Power Duration Plan | 1 hours  | 2 hours  |          | 4 hours  |          |
|----------------------------|----------|----------|----------|----------|----------|
| Hybrid inverter power      | 100kW    | 50kW     | 80kW     | 50kW     | 80kW     |
| Battery model              | BOS-A160 | BOS-A100 | BOS-A160 | BOS-A100 | BOS-A160 |
| Number of batteries        | 1 pc     | 1 pc     | 1 pc     | 2 pcs    | 2 pcs    |



Summer Series  
Small-Scale C&I ESS Solution

Rack-Mounted Battery (HV)



Intelligent Functions

- Protection functions against over-discharge, over-charge, over-current, over-high or low temperature
- Automatically manage charge/discharge and balance current/voltage
- Less self-discharge, up to 6 months without charging it on shelf
- No memory effect, excellent performance of shallow charge and discharge



Convenient

- 19-inch embedded design
- Support USB and Wi-Fi upgrade(optional)
- Support remotely monitoring and upgrade
- Multiple battery modules can be in parallel



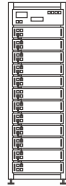
Safe and Reliable

- LFP Battery: safety, long lifespan and high-energy density
- The module is non-toxic, non-polluting, and eco-friendly
- Working temperature: -20°C ~ 55°C

1. DC Usable Energy, test conditions : 90% DOD, 0.3C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.  
2. The current is affected by temperature and SOC.

BOS-GH/BOS-GL (JP,NA)

Technical Data



Main Parameters

| Model                                     | BOS-GL60                        | BOS-GH40    | BOS-GH60    |
|-------------------------------------------|---------------------------------|-------------|-------------|
| Cell Chemistry                            | LiFePO <sub>4</sub>             |             |             |
| Module Energy ( kWh )                     | 5.12                            |             |             |
| Module Nominal Voltage ( V )              | 51.2                            |             |             |
| Module Capacity ( Ah )                    | 100                             |             |             |
| Battery Module Qty In Series ( Optional ) | 12 (2P6S)                       | 8 (1P8S)    | 12 (1P12S)  |
| System Nominal Voltage ( V )              | 307.2                           | 409.6       | 614.4       |
| System Operating Voltage ( V )            | 240 ~ 350.4                     | 320 ~ 467.2 | 480 ~ 700.8 |
| System Energy ( kWh )                     | 61.44                           | 40.96       | 61.44       |
| System Usable Energy ( kWh )              | 55.29                           | 36.86       | 55.29       |
| Charge / Discharge <sup>2</sup>           | Recommend                       | 100         | 50          |
| Current ( A )                             | Max.                            | 100         |             |
|                                           | Peak Discharge ( 2 mins, 25°C ) | 125         |             |

DC Technical Specification

|                              |                                                                      |                    |                     |
|------------------------------|----------------------------------------------------------------------|--------------------|---------------------|
| Working Temperature ( °C )   | Charge : 0 ~ 55 / Discharge : -20 ~ 55                               |                    |                     |
| Status Indicator             | Yellow : Battery High Voltage Power On    Red : Battery System Alarm |                    |                     |
| Communication Port           | CAN2.0 / RS485                                                       |                    |                     |
| Humidity                     | 5% ~ 85%RH                                                           |                    |                     |
| Altitude                     | ≤2000m                                                               |                    |                     |
| IP Rating of Enclosure       | IP20                                                                 |                    |                     |
| Dimension ( W × D × H, mm )  | 530 × 667 × 2187                                                     | 530 × 667 × 1629   | 530 × 667 × 2187    |
| Weight Approximate ( kg )    | 75+45 × 12+20=635kg                                                  | 53+45 × 8+20=433kg | 75+45 × 12+20=635kg |
| Installation Location        | Rack Mounting                                                        |                    |                     |
| Storage Temperature ( °C )   | 0 ~ 35                                                               |                    |                     |
| Recommend Depth of Discharge | 90%                                                                  |                    |                     |
| Cycle Life                   | 25±2°C, 0.5C / 0.5C, EOL70%≥6000                                     |                    |                     |
| Warranty Period              | 10 years                                                             |                    |                     |
| Certification                | UL1973 / UL9540A / UN38.3 / UL9540                                   |                    |                     |

Backup Power Duration Plan

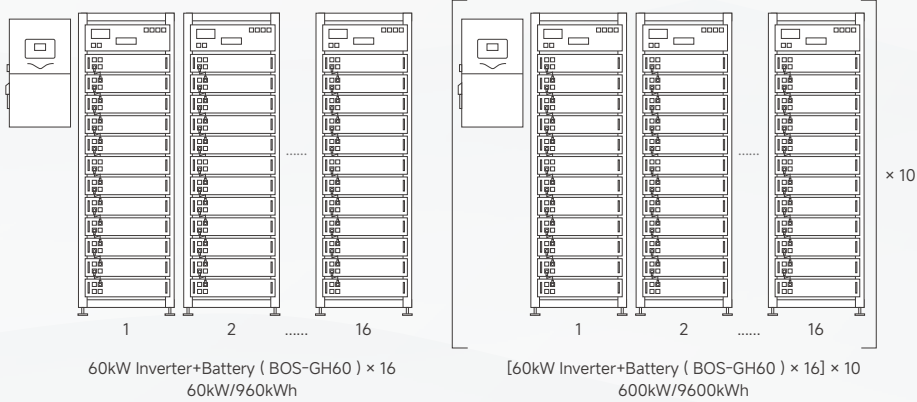
|                       | 1 hour   |          | 2 hours  |          |
|-----------------------|----------|----------|----------|----------|
| Hybrid inverter power | 30kW     | 60kW     | 60kW     | 30kW     |
| Battery model         | BOS-GH40 | BOS-GH60 | BOS-GH60 | BOS-GL60 |
| Number of batteries   | 1 pc     | 1 pc     | 2 pcs    | 1 pcs    |

BOS-GH60 | Minimum 4 battery packs connected in series, maximum 12 batteries

| Battery Module Number                     | BOS-G20 | BOS-G25 | BOS-G30 | BOS-G35 | BOS-G40 | BOS-G45 | BOS-G50 | BOS-G55 | BOS-G60 |
|-------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Battery Module Qty In Series ( Optional ) | 4       | 5       | 6       | 7       | 8       | 9       | 10      | 11      | 12      |
| System Energy ( kWh )                     | 20.48   | 25.6    | 30.72   | 35.84   | 40.96   | 46.08   | 51.2    | 56.32   | 61.44   |

Supports up to 16 battery clusters in parallel

Supports up to 10 AC inverters in parallel



Summer Series  
Small-Scale C&I ESS Solution

Rack-Mounted Battery (HV)

ORION G



Convenient

- Quick installation standard of 19-inch embedded designed module is comfortable for installation and maintenance.



Intelligent BMS

- It has protection functions including over-discharge, over-charge, over-current and over-high or low temperature. The system can automatically manage charge and discharge state and balance current and voltage of each cell.



Eco-friendly

- The whole module is non-toxic, non-polluting and environmentally friendly.



Safe and Reliable

- Cathode material is made from LiFePO4 with safety performance and long cycle life. The module has less self-discharge, up to 6 months without charging it on shelf, no memory effect, excellent performance of shallow charge and discharge.



Flexible Configuration

- Multiple battery modules can be in parallel for expanding capacity and power. Support USB upgrade, remote up grade (Compatible with Deye inverter).

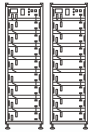


Wide Temperature

- Working temperature range is from -20°C to 55°C, with excellent discharge performance and cycle life.

BOS-G Pro (EU, SA, AU)

Technical Data



Main Parameters

|                                           |                                 |             |             |             |
|-------------------------------------------|---------------------------------|-------------|-------------|-------------|
| Cell Chemistry                            | LiFePO <sub>4</sub>             |             |             |             |
| Module Energy ( kWh )                     | 5.12                            |             |             |             |
| Module Nominal Voltage ( V )              | 51.2                            |             |             |             |
| Module Capacity ( Ah )                    | 100                             |             |             |             |
| Battery Module Number                     | BOS-G25 Pro                     | BOS-G40 Pro | BOS-G60 Pro | BOS-G80-Pro |
| Battery Module Qty In Series ( Optional ) | 5 (Min)                         | 8           | 12          | 16 (Max)    |
| System Nominal Voltage ( V )              | 256                             | 409.6       | 614.4       | 819.2       |
| System Operating Voltage ( V )            | 220~292                         | 352~467.2   | 528~700.8   | 704~934.4   |
| System Energy ( kWh )                     | 25.6                            | 40.96       | 61.44       | 81.92       |
| System Usable Energy ( kWh )              | 23.04                           | 36.86       | 55.3        | 73.72       |
| Rated DC Power                            | 25.6                            | 40.96       | 61.44       | 81.92       |
| Charge / Discharge                        | Recommend                       | 50          |             |             |
| Current ( A )                             | Max.                            | 100         |             |             |
|                                           | Peak Discharge ( 2 mins, 25°C ) | 125         |             |             |

Other Parameters

|                                   |                                                                   |     |                  |                   |
|-----------------------------------|-------------------------------------------------------------------|-----|------------------|-------------------|
| Operating Temperature ( °C )      | Charge : 0 ~ 55 / Discharge : -20 ~ 55                            |     |                  |                   |
| Status Indicator                  | Yellow : Battery High Voltage Power On Red : Battery System Alarm |     |                  |                   |
| Communication Port                | CAN2.0 / RS485                                                    |     |                  |                   |
| Humidity                          | 5% ~ 85%RH                                                        |     |                  |                   |
| Altitude                          | ≤3000m                                                            |     |                  |                   |
| IP Rating of Enclosure            | IP20                                                              |     |                  |                   |
| System Dimension ( W x D x H,mm ) | 530 × 602 × 1629                                                  |     | 530 × 602 × 2219 | 1060 × 602 × 1629 |
| System Weight Approximate ( kg )  | 290                                                               | 428 | 622              | 883               |
| Installation Location             | Rack Mounting                                                     |     |                  |                   |
| Storage Temperature(°C)           | 0 ~ 35                                                            |     |                  |                   |
| Recommend Depth of Discharge      | 90%                                                               |     |                  |                   |
| Cycle Life                        | 25±2°C, 0.5C / 0.5C, EOL70%≥6000                                  |     |                  |                   |
| Warranty Period                   | 10 years                                                          |     |                  |                   |
| Certification                     | UN38.3 / CE / CE-EMC / IEC62040 / CEC / VDE                       |     |                  |                   |

| Inverter               | 1h  | 2h     | 3h     | 4h     |
|------------------------|-----|--------|--------|--------|
| SUN-30K-SG01HP3-EU-BM3 | X6  | X12    | X9 X2  | X12 X2 |
| SUN-40K-SG01HP3-EU-BM4 | X8  | X8 X2  | X12 X2 | X11 X3 |
| SUN-50K-SG01HP3-EU-BM4 | X10 | X10 X2 | X10 X3 | X10 X4 |
| SUN-60K-SG02HP3-EU-EM4 | X12 | X12 X2 | X12 X3 | X16 X3 |
| SUN-80K-SG02HP3-EU-EM6 | X16 | X16 X2 | X16 X3 | X16 X4 |

Summer Series

Small-Scale C&I ESS Solution

Small-Scale C&I Battery Cabinet



Safety Protection

- Lithium iron phosphate LFP batteries, battery packs and
- Systems all use aerosol fire suppression solutions



Integrated Technology

- EMS, hybrid inverter and BMS integration technology
- Power supply redundancy design
- Support for black start function, off-grid operation



Total Protection

- Combustible gas, smoke and temperature detection
- System active exhaust and fire alarm



Flexible Extension

- Support battery expansion a maximum capacity of
- 3600kWh( Off-grid )

GE-F60 (NA, AS, AF, LATAM, EU, AU)

Technical Data



Main Parameters

|                                                |                                 |     |
|------------------------------------------------|---------------------------------|-----|
| Cell Chemistry                                 | LiFePO <sub>4</sub>             |     |
| Module Energy ( kWh )                          | 5.12                            |     |
| Module Nominal Voltage ( V )                   | 51.2                            |     |
| Module Capacity ( Ah )                         | 100                             |     |
| Battery Module Qty In Series                   | 12                              |     |
| System Nominal Voltage ( V )                   | 614.4                           |     |
| System Operating Voltage ( V )                 | 480 ~ 700                       |     |
| System Energy ( kWh )                          | 61.44                           |     |
| System Usable Energy ( kWh ) <sup>1</sup>      | 55.29                           |     |
| Rated DC Power                                 | 61.44                           |     |
| Charge / Discharge <sup>2</sup><br>Current (A) | Recommend                       | 50  |
|                                                | Max.                            | 100 |
|                                                | Peak Discharge ( 2 mins, 25°C ) | 125 |

Other Parameters

|                              |                                                          |                            |
|------------------------------|----------------------------------------------------------|----------------------------|
| Status Indicator             | Yellow : Battery High Voltage Power On                   | Red : Battery System Alarm |
| Communication Port           | CAN2.0 / RS485                                           |                            |
| Humidity                     | 5% ~ 85%RH                                               |                            |
| Altitude                     | ≤2000m                                                   |                            |
| IP Rating of Enclosure       | IP55                                                     |                            |
| Dimension ( W × D × H, mm )  | 783 × 1059 × 2235                                        |                            |
| Weight Approximate ( kg )    | 1070                                                     |                            |
| Installation Method          | Floor-Mounted                                            |                            |
| Storage Temperature ( °C )   | 0 ~ 35                                                   |                            |
| Operating Temperature ( °C ) | -30 ~ 60 ( > 45 derating )                               |                            |
| Recommend Depth of Discharge | 90%                                                      |                            |
| Cycle Life                   | ≥6000 ( 25±2°C, 0.5C / 0.5C, EOL70% )                    |                            |
| Certification                | UN38.3, IEC, VDE, CEI, CEC, FCC, UL1973, UL9540A, UL9540 |                            |

Typical Application Solutions

|                                |                                       |                         |
|--------------------------------|---------------------------------------|-------------------------|
| 6 × F60+50kW Inverter          | Maximum 6 DC parallel-connected units | Up to : 50kW / 360kWh   |
| ( 6 × F60+50kW Inverter ) × 10 | Maximum 10 groups AC parallel         | Up to : 500kW / 3600kWh |
| ( F60+50kW Inverter ) × 10     | Maximum 10 groups AC parallel         | Up to : 500kW / 600kWh  |
| 10 × F120                      | 30kW/ 50kW Inverter selectable        | Up to : 500kW / 1200kWh |
| F120+4 × F60                   | 1+4 Combined DC Expansion             | Up to : 50kW / 360kWh   |
| ( F120+4 × F60 ) × 10          | Maximum 10 groups AC parallel         | Up to : 500kW / 3600kWh |

1. DC Usable Energy, test conditions : 90% DOD, 0.3C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.
2. The current is affected by temperature and SOC.
3. Made in China.

Summer Series  
Small-Scale C&I ESS Solution

Small-Scale C&I ESS



Protection

- Combustible gas, smoke and temperature detection
- System active exhaust and fire alarm
- Battery pack and system use aerosol fire suppression



Multi-Fusion

- All-in-One design
- EMS, hybrid inverter and BMS integrated technology
- Support black start function and off-grid operation
- Power supply redundancy design



Enhanced Reliability

- Maximum battery temperature  $\leq 35^{\circ}\text{C}$  at rated power
- IP55-rated for outdoor use
- Wide temperature range:  $-20^{\circ}\text{C} \sim 55^{\circ}\text{C}$



Flexible

- F120 supports the integration of 30/40/50kW inverters
- Support expansion a maximum capacity of 3600kWh

GE-F120-2H2/4/6 (NA, AU, EU)

Technical Data



System Specification

| Model                                        | GE-F120-4H2                         | GE-F120-3H2 | GE-F120-2H2 |
|----------------------------------------------|-------------------------------------|-------------|-------------|
| Main Parameters                              |                                     |             |             |
| Nominal Output Power / UPS Power ( W )       | 30000                               | 40000       | 50000       |
| AC Output Frequency and Voltage              | 50 / 60Hz ; 220 / 380, 230 / 400Vac |             |             |
| Grid Type                                    | 3L / N / PE                         |             |             |
| Number of Parallel ( Off-grid )              | 10                                  |             |             |
| Energy Configuration ( kWh )                 | 122.8                               |             |             |
| Dimension ( W × D × H, mm )                  | 1780 × 1056 × 2235                  |             |             |
| Weight Approximate ( kg )                    | 2090                                |             |             |
| AC Output Rated Current ( A )                | 45                                  | 58          | 75.8        |
| Battery Operating Voltage ( V )              | 500 ~ 700                           |             |             |
| Max. RTE                                     | 89%                                 |             |             |
| Battery Chemistry                            | LiFePO4                             |             |             |
| IP Rating of Enclosure                       | IP55                                |             |             |
| Installation Method                          | Floor-Mounted                       |             |             |
| Storage Temperature ( $^{\circ}\text{C}$ )   | 0 ~ 35                              |             |             |
| Operating Temperature ( $^{\circ}\text{C}$ ) | $-20 \sim 55$ ( $> 43$ derating )   |             |             |

Inverter Technical Specification

|                                                    |                                                                                                                             |             |             |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------|-------------|
| Max. PV Input Power ( W )                          | 39000                                                                                                                       | 52000       | 65000       |
| Max. PV Input Current ( A )                        | 36+36+36                                                                                                                    | 36+36+36+36 | 36+36+36+36 |
| Rated PV Input Voltage ( Vdc )                     | 600                                                                                                                         |             |             |
| Start Up DC Voltage ( Vdc )                        | 180                                                                                                                         |             |             |
| MPPT Voltage Range ( Vdc )                         | 150-850                                                                                                                     |             |             |
| Max. PV Short-circuit Current ( A )                | 55+55+55                                                                                                                    | 55+55+55+55 | 55+55+55+55 |
| Number of MPPT                                     | 3                                                                                                                           | 4           | 4           |
| Peak Power ( off grid )                            | 1.5 time of rated power, 10s                                                                                                |             |             |
| Power Factor                                       | 0.8 leading to 0.8 lagging                                                                                                  |             |             |
| THD                                                | $< 3\%$                                                                                                                     |             |             |
| DC Injection current ( mA )                        | $< 0.5\% \text{I}_n$                                                                                                        |             |             |
| Display                                            | LCD                                                                                                                         |             |             |
| Operating Temperature Range ( $^{\circ}\text{C}$ ) | $-40 \sim 60$ ( $> 45$ derating )                                                                                           |             |             |
| Relative Humidity                                  | 15% ~ 85% ( No Condensing )                                                                                                 |             |             |
| Dimension ( W × D × H, mm )                        | 527 × 294 × 894                                                                                                             |             |             |
| Inverter Communication                             | CAN, RS485, WIFI, ETH                                                                                                       |             |             |
| Grid Regulation                                    | VDE 4105, IEC 61727 / 62116, VDE 0126, AS 4777.2, CEI 0-21, EN 50549-1, G98, G99, C10-11, UNE 217002, NBR 16149 / NBR 16150 |             |             |
| Max. Efficiency                                    | 97.6%                                                                                                                       |             |             |
| MPPT Efficiency                                    | 99.9%                                                                                                                       |             |             |

Battery Technical Specification

|                                           |                                                                                    |
|-------------------------------------------|------------------------------------------------------------------------------------|
| Battery Module Nominal Voltage ( V )      | 51.2                                                                               |
| Battery Module Energy ( kWh )             | 5.12                                                                               |
| BMS Communication                         | CAN                                                                                |
| Battery Module Dimension ( W × D × H mm ) | 440 × 570 × 133                                                                    |
| Battery Module Weight ( kg )              | 44                                                                                 |
| Cycle Life                                | $\geq 6000$ ( @ $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ , 0.5C / 0.5C, 70%EOL ) |
| Battery Module Certification              | UN38.3, IEC 62619, IEC 61000, VED, CEI, FCC, UL1973, UL9540, UL9540A               |

Summer Series  
C&I ESS Solution

C&I Outdoor Battery Cabinet

NEW ORION E



Ultimate Protection

- Six-dimensional safety design, eliminating the risk of fire and explosion
- High-intensity cabinet, unique patented door latch design, eliminates structural weak points
- Hour-level fire resistance, prevent heat spread



Highly Integrated

- Outer cabinet wall preset inverter bracket installation position, no wall bearing concerns, no need to drill
- Single cabinet can easily deploy PV+BESS, PV+BESS+DG
- Can be installed side by side or back to back, reducing the footprint



Stable Efficient

- Long-life lithium iron phosphate battery, ≥ 8000 cycles
- High-efficiency thermal management, no derating at 45°C, cell temperature difference ≤6°C
- Full-range 0.5P charge and discharge, efficient recharging, stable load-bearing



Intelligent Management

- Leading rack-level + pack-level + cell-level energy balancing algorithm, non-inductive pack change and cabinet expansion
- Single cabinet can be configured with a 2/3/4h system of 30~125kW, up to 10 units battery cabinet parallel
- Integrated energy platform, 24/7 AI smart customization of optimal power usage strategies

GE-F128 & GE-F240 & GE-F256 (EU, AS, AF, LATAM, AU)  
Technical Data

Main Parameters

| GE-F128 Series                             |                            |                 |                 |
|--------------------------------------------|----------------------------|-----------------|-----------------|
| Model                                      | GE-F96-BC-2-A3             | GE-F112-BC-2-A3 | GE-F128-BC-2-A3 |
| Cell Type                                  | LiFePO <sub>4</sub>        |                 |                 |
| Module Capacity (Ah)                       | 314                        |                 |                 |
| Module Nominal Voltage (Vdc)               | 51.2                       |                 |                 |
| Module Energy (kWh)                        | 16.08                      |                 |                 |
| Module Qty In Series                       | 6                          | 7               | 8               |
| System Nominal Energy (kWh)                | 96.46                      | 112.53          | 128.61          |
| System Usable Energy (kWh) <sup>[1]</sup>  | 96.46                      | 112.53          | 128.61          |
| System Nominal Voltage (Vdc)               | 307.2                      | 358.4           | 409.6           |
| System Operating Voltage (Vdc)             | 240~350.4                  | 280~408.8       | 320~467.2       |
| Rated DC Power (kW)                        | 48                         | 56              | 64              |
| Charge/Discharge Current(A) <sup>[2]</sup> | Recommend                  |                 |                 |
|                                            | Max. Continuous            |                 |                 |
|                                            | Peak Discharge@15s/20~45°C |                 |                 |

Other Parameters

|                                           |                                                                                         |      |      |
|-------------------------------------------|-----------------------------------------------------------------------------------------|------|------|
| Fire Protection System                    | Aerosol and Water fire interface CO gas detection, Active exhaust and Explosion venting |      |      |
| Cooling Method                            | Smart Air Cooling                                                                       |      |      |
| Communication Port                        | CAN, RS485                                                                              |      |      |
| Communication protocol                    | CAN2.0, Modbus485                                                                       |      |      |
| Operating Temperature (°C) <sup>[3]</sup> | -30~55                                                                                  |      |      |
| Recommend Storage Temperature (°C)        | 0~35                                                                                    |      |      |
| Humidity                                  | 5% ~ 95%RH (No Condensing)                                                              |      |      |
| Altitude                                  | 3000m                                                                                   |      |      |
| IP Protection                             | IP55                                                                                    |      |      |
| Anti Corrosion Level                      | Standard: C4-M, customizable up to C5                                                   |      |      |
| Dimension (W x D x H,mm)                  | 998 x 1240 x 2405.5                                                                     |      |      |
| Weight (kg)                               | 1460                                                                                    | 1575 | 1690 |
| Installation Location                     | Floor Mount                                                                             |      |      |
| Cycle Life                                | ≥8000 (25±2°C,0.5P,EOL70%)                                                              |      |      |
| Certification                             | UN38.3,CE,IEC62619,IE62477,IEC62933-5-2,UL9540A                                         |      |      |

1. Test conditions : 100% DOD, 0.5P charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.  
2. The current is affected by temperature and SOC.  
3. Derated operation at > 45°C.

# GE-F128 & GE-F240 & GE-F256 (EU, AS, AF, LATAM, AU)

## Technical Data

| Main Parameters                               |                            |                     |                     |                     |                     |
|-----------------------------------------------|----------------------------|---------------------|---------------------|---------------------|---------------------|
| GE-F240 Series                                |                            |                     |                     |                     |                     |
| Model                                         | GE-F176<br>-BC-2-A3        | GE-F192<br>-BC-2-A3 | GE-F208<br>-BC-2-A3 | GE-F224<br>-BC-2-A3 | GE-F240<br>-BC-2-A3 |
| Cell Type                                     | LiFePO <sub>4</sub>        |                     |                     |                     |                     |
| Module Capacity (Ah)                          | 314                        |                     |                     |                     |                     |
| Module Nominal Voltage (Vdc)                  | 51.2                       |                     |                     |                     |                     |
| Module Energy (kWh)                           | 16.08                      |                     |                     |                     |                     |
| Module Qty In Series                          | 11                         | 12                  | 13                  | 14                  | 15                  |
| System Nominal Energy (kWh)                   | 176.84                     | 192.92              | 208.99              | 225.07              | 241.15              |
| System Usable Energy (kWh) <sup>[1]</sup>     | 176.84                     | 192.92              | 208.99              | 225.07              | 241.15              |
| System Nominal Voltage (Vdc)                  | 563.2                      | 614.4               | 665.6               | 716.8               | 768                 |
| System Operating Voltage (Vdc)                | 440~642.4                  | 480~700.8           | 520~759.2           | 560~817.6           | 600~876             |
| Rated DC Power (kW)                           | 88                         | 96                  | 104                 | 112                 | 121                 |
| Charge/Discharge<br>Current(A) <sup>[2]</sup> | Recommend                  |                     |                     |                     |                     |
|                                               | Max. Continuous            |                     |                     |                     |                     |
|                                               | Peak Discharge@15s/20~45°C |                     |                     |                     |                     |

| Other Parameters                          |                                                                                         |      |      |      |      |
|-------------------------------------------|-----------------------------------------------------------------------------------------|------|------|------|------|
| Fire Protection System                    | Aerosol and Water fire interface CO gas detection, Active exhaust and Explosion venting |      |      |      |      |
| Cooling Method                            | Smart Air Cooling                                                                       |      |      |      |      |
| Communication Port                        | CAN, RS485                                                                              |      |      |      |      |
| Communication protocol                    | CAN2.0, Modbus485                                                                       |      |      |      |      |
| Operating Temperature (°C) <sup>[3]</sup> | -30~55                                                                                  |      |      |      |      |
| Recommend Storage Temperature (°C)        | 0~35                                                                                    |      |      |      |      |
| Humidity                                  | 5% ~ 95%RH (No Condensing)                                                              |      |      |      |      |
| Altitude                                  | 3000m                                                                                   |      |      |      |      |
| IP Protection                             | IP55                                                                                    |      |      |      |      |
| Anti Corrosion Level                      | Standard: C4-M, customizable up to C5                                                   |      |      |      |      |
| Dimension (W x D x H,mm)                  | 1303 x 1240 x 2405.5                                                                    |      |      |      |      |
| Weight (kg)                               | 2150                                                                                    | 2264 | 2380 | 2495 | 2610 |
| Installation Location                     | Floor Mount                                                                             |      |      |      |      |
| Cycle Life                                | ≥8000 (25±2°C,0.5P,EOL70%)                                                              |      |      |      |      |
| Certification                             | UN38.3,CE,IEC62619,IE62477,IEC62933-5-2,UL9540A                                         |      |      |      |      |

1. Test conditions : 100% DOD, 0.5P charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.

2. The current is affected by temperature and SOC.

3. Derated operation at > 45°C.

| Main Parameters                               |                            | GE-F256-BC-2-A3 |
|-----------------------------------------------|----------------------------|-----------------|
| Cell Type                                     | LiFePO <sub>4</sub>        |                 |
| Module Capacity (Ah)                          | 314                        |                 |
| Module Nominal Voltage (Vdc)                  | 51.2                       |                 |
| Module Energy (kWh)                           | 16.08                      |                 |
| Module Qty In Series                          | 16                         |                 |
| System Nominal Energy (kWh)                   | 257.23                     |                 |
| System Usable Energy (kWh) <sup>[1]</sup>     | 257.23                     |                 |
| System Nominal Voltage (Vdc)                  | 819.2                      |                 |
| System Operating Voltage (Vdc)                | 640~934.4                  |                 |
| Rated DC Power (kW)                           | 129                        |                 |
| Charge/Discharge<br>Current(A) <sup>[2]</sup> | Recommend                  | 157             |
|                                               | Max. Continuous            | 180             |
|                                               | Peak Discharge@15s/20~45°C | 285             |

| Other Parameters                          |                                                                                         |
|-------------------------------------------|-----------------------------------------------------------------------------------------|
| Fire Protection System                    | Aerosol and Water fire interface CO gas detection, Active exhaust and Explosion venting |
| Cooling Method                            | Smart Air Cooling                                                                       |
| Communication Port                        | CAN, RS485                                                                              |
| Communication protocol                    | CAN2.0, Modbus485                                                                       |
| Operating Temperature (°C) <sup>[3]</sup> | -30~55                                                                                  |
| Recommend Storage Temperature (°C)        | 0~35                                                                                    |
| Humidity                                  | 5% ~ 95%RH (No Condensing)                                                              |
| Altitude                                  | 3000m                                                                                   |
| IP Protection                             | IP55                                                                                    |
| Anti Corrosion Level                      | Standard: C4-M, customizable up to C5                                                   |
| Dimension (W x D x H,mm)                  | 1303x1240x2510                                                                          |
| Weight (kg)                               | 2790                                                                                    |
| Installation Location                     | Floor Mount                                                                             |
| Cycle Life                                | ≥8000 (25±2°C,0.5P,EOL70%)                                                              |
| Certification                             | UN38.3,CE,IEC62619,IE62477,IEC62933-5-2,UL9540A                                         |

1. Test conditions : 100% DOD, 0.5P charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.

2. The current is affected by temperature and SOC.

3. Derated operation at > 45°C.

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AUT  
UMN Series

## Micro ESS Solution

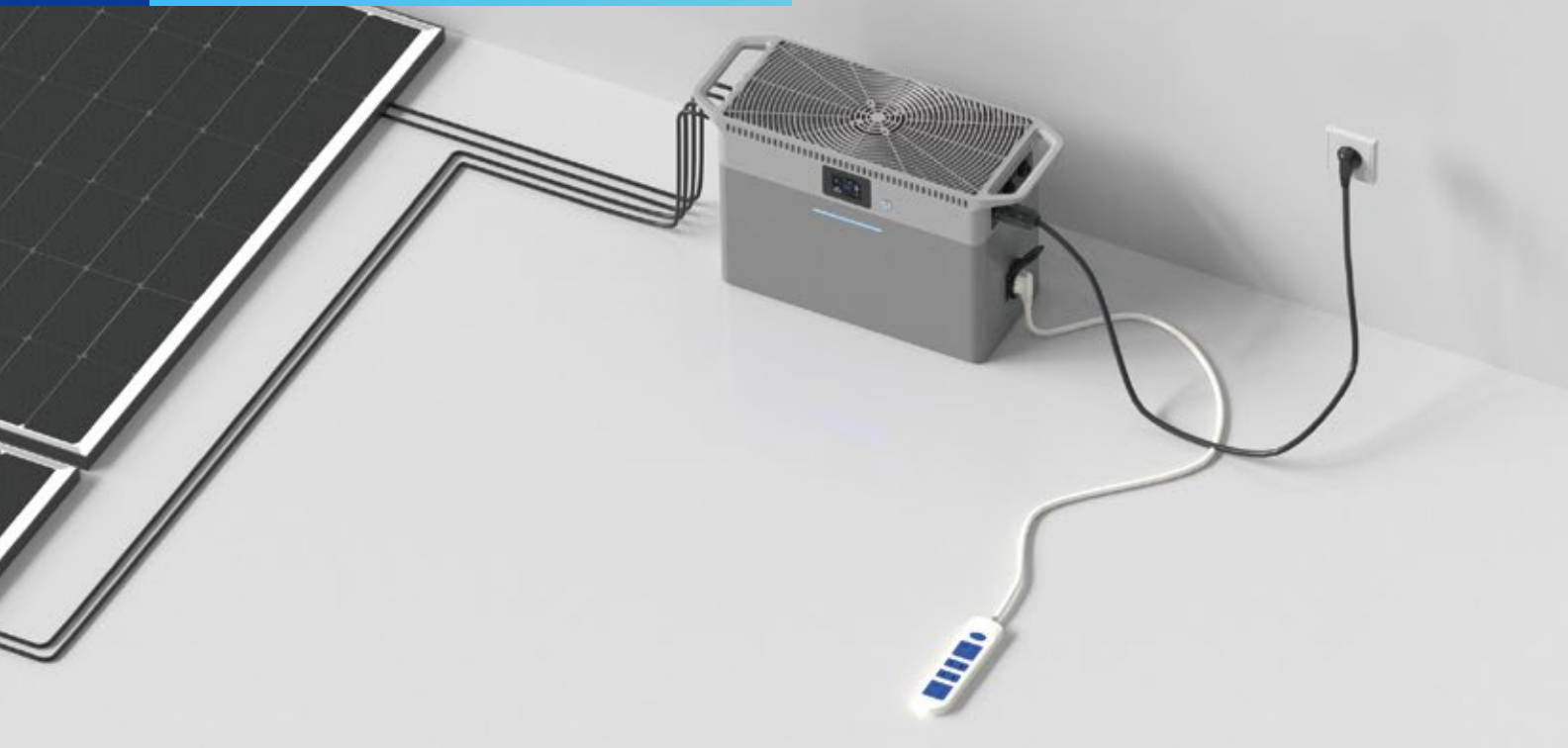
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(EU, AS, AF, LATAM)

## Residential ESS Solution

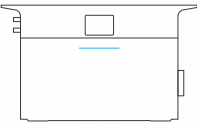
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Autumn Series  
Micro ESS Solution

Micro ESS



SUN-BK80/160/200/250-2.56KWH-EU-AM4-18/32L (EU, AS, AF, LATAM)



Technical Data

| Model                                            | SUN-BK80-2.56KWH<br>-EU-AM4-18L                                                                                                                                                                                       | SUN-BK160-2.56KWH<br>-EU-AM4-18L | SUN-BK200-2.56KWH<br>-EU-AM4-18L | SUN-BK250-2.56KWH<br>-EU-AM4-18L |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Battery Input Data                               |                                                                                                                                                                                                                       |                                  |                                  |                                  |
| Battery Type                                     | LiFePO <sub>4</sub>                                                                                                                                                                                                   |                                  |                                  |                                  |
| Battery Voltage Range(V)                         | 44.8-57.6 V                                                                                                                                                                                                           |                                  |                                  |                                  |
| Battery Nominal Energy (Wh)                      | 2560Wh                                                                                                                                                                                                                |                                  |                                  |                                  |
| Max.Charging/Discharging Current(A)              | 50A                                                                                                                                                                                                                   |                                  |                                  |                                  |
| Charging Strategy for Li-ion Battery             | Self-adaption to BMS                                                                                                                                                                                                  |                                  |                                  |                                  |
| PV String Input Data                             |                                                                                                                                                                                                                       |                                  |                                  |                                  |
| Max. PV access power (W)                         | 4400W                                                                                                                                                                                                                 |                                  |                                  |                                  |
| Max. Operating PV Input Current (A)              | 18+18+18+18A                                                                                                                                                                                                          |                                  |                                  |                                  |
| Max. Input Short-Circuit Current (A)             | 32+32+32+32A                                                                                                                                                                                                          |                                  |                                  |                                  |
| Rated PV Input voltage (V)                       | 42.5V                                                                                                                                                                                                                 |                                  |                                  |                                  |
| Start-up Voltage (V)                             | 25Vdc                                                                                                                                                                                                                 |                                  |                                  |                                  |
| MPPT voltage range (V)                           | 20 ~ 55V                                                                                                                                                                                                              |                                  |                                  |                                  |
| No. of MPP Trackers/No. of Strings MPP Tracker   | 4/1+1+1+1                                                                                                                                                                                                             |                                  |                                  |                                  |
| AC Input/Output Data                             |                                                                                                                                                                                                                       |                                  |                                  |                                  |
| Rated AC Input/Output Active Power               | 800W                                                                                                                                                                                                                  | 1600W                            | 2000W                            | 2500W                            |
| Max. AC Input/Output Active Power                | 880W                                                                                                                                                                                                                  | 1760W                            | 2200W                            | 2750W                            |
| Max. off grid power                              | 2500W                                                                                                                                                                                                                 |                                  |                                  |                                  |
| Rated AC Input/Output Current (A)                | 3.7A / 3.5A                                                                                                                                                                                                           | 7.3A / 7.0A                      | 9.1A / 8.7A                      | 11.4A / 10.9A                    |
| Max. AC Input/Output Current (A)                 | 4A / 3.9A                                                                                                                                                                                                             | 8A / 7.7A                        | 10A / 9.6A                       | 12.5A / 12A                      |
| Peak Power (off-grid) (W)                        | 2 times of rated power,10s                                                                                                                                                                                            |                                  |                                  |                                  |
| AC Input / Output Frequency and Voltage          | 50Hz ( 45Hz ~ 55Hz ) , 60Hz ( 55Hz ~ 65Hz ) , L + N + PE , 220 / 230 Vac                                                                                                                                              |                                  |                                  |                                  |
| Power Factor Adjustment Range                    | 0.8 leading-0.8lagging                                                                                                                                                                                                |                                  |                                  |                                  |
| Max. Continuous AC Passthrough (grid to load)(A) | 30A                                                                                                                                                                                                                   |                                  |                                  |                                  |
| DC Injection Current                             | <0.5%In                                                                                                                                                                                                               |                                  |                                  |                                  |
| Efficiency                                       |                                                                                                                                                                                                                       |                                  |                                  |                                  |
| Max. Efficiency                                  | 96.5%                                                                                                                                                                                                                 |                                  |                                  |                                  |
| Euro Efficiency                                  | 96.0%                                                                                                                                                                                                                 |                                  |                                  |                                  |
| MPPT Efficiency                                  | >99%                                                                                                                                                                                                                  |                                  |                                  |                                  |
| Equipment Protection                             |                                                                                                                                                                                                                       |                                  |                                  |                                  |
| Integrated                                       | DC reverse polarity protection, AC Output Overcurrent Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection, Insulation Impedance detection, Anti-islanding protection |                                  |                                  |                                  |
| Surge Protection Level                           | TYPE II(DC),TYPE II(AC)                                                                                                                                                                                               |                                  |                                  |                                  |
| General Data                                     |                                                                                                                                                                                                                       |                                  |                                  |                                  |
| Max. Inverter Parallel NO.                       | 3 pcs (up to 7.5 kW rated output)                                                                                                                                                                                     |                                  |                                  |                                  |
| Communication Interface                          | Wi-Fi, Bluetooth, LoRa                                                                                                                                                                                                |                                  |                                  |                                  |
| Operating Temperature Range (°C)                 | -10°C ~ 55°C, >45°C Derating, (-20°C~55°C with heating, optional)                                                                                                                                                     |                                  |                                  |                                  |
| Permissible Altitude (m)                         | 2000m                                                                                                                                                                                                                 |                                  |                                  |                                  |
| Ingress Protection(IP) Rating                    | IP 65                                                                                                                                                                                                                 |                                  |                                  |                                  |
| Cabinet Size (W X H X D)                         | 560 × 330 × 210mm                                                                                                                                                                                                     |                                  |                                  |                                  |
| Weight (kg)                                      | 30kg                                                                                                                                                                                                                  |                                  |                                  |                                  |
| Permissible Ambient Humidity                     | 0% ~ 95% ( No Condensing )                                                                                                                                                                                            |                                  |                                  |                                  |
| Warranty                                         | 10 years                                                                                                                                                                                                              |                                  |                                  |                                  |
| Grid Regulation                                  | VDE 4105, IEC 61727/62116, VDE 0126, AS 4777.2, CEI 0-21, EN 50549-1, G98, C10-11, UNE 217002                                                                                                                         |                                  |                                  |                                  |
| Safety EMC/Standard                              | IEC 62619, UN38.3, IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1/2/3/4                                                                                                                                             |                                  |                                  |                                  |



High Conversion Efficiency

- DC-AC conversion efficiency of up to 96.5%
- 2500W rated power AC charge/discharge
- Supports 18A high-current PV modules



UPS-Grade Backup Power

- Grid-tie and off-grid switchover time is less than 4ms



Seamless Scalability

- Easily expand the system with additional battery capacity



Intelligent Control

- Local bluetooth communication, supports offline control via the Deye Cloud APP
- Supports Deye smart IoT system: smart plug, smart switch, wireless CT



Enhanced Reliability

- IP65 Protection Rating
- 10-year standard warranty



Quiet Operation

- Fanless design with natural cooling

SUN-BK80/160/200/250-2.56KWH-EU  
-AM4-18/32L (EU, AS, AF, LATAM)

Technical Data



| Model                                            | SUN-BK80-2.56KWH<br>-EU-AM4-32L                                                                                                                                                                                       | SUN-BK160-2.56KWH<br>-EU-AM4-32L | SUN-BK200-2.56KWH<br>-EU-AM4-32L | SUN-BK250-2.56KWH<br>-EU-AM4-32L |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Battery Input Data                               |                                                                                                                                                                                                                       |                                  |                                  |                                  |
| Battery Type                                     | LiFePO <sub>4</sub>                                                                                                                                                                                                   |                                  |                                  |                                  |
| Battery Voltage Range(V)                         | 44.8-57.6 V                                                                                                                                                                                                           |                                  |                                  |                                  |
| Battery Nominal Energy (Wh)                      | 2560Wh                                                                                                                                                                                                                |                                  |                                  |                                  |
| Max.Charging/Discharging Current(A)              | 50A                                                                                                                                                                                                                   |                                  |                                  |                                  |
| Charging Strategy for Li-ion Battery             | Self-adaption to BMS                                                                                                                                                                                                  |                                  |                                  |                                  |
| PV String Input Data                             |                                                                                                                                                                                                                       |                                  |                                  |                                  |
| Max. PV access power (W)                         | 5760W                                                                                                                                                                                                                 |                                  |                                  |                                  |
| Max. Operating PV Input Current (A)              | 32+32+32+32A                                                                                                                                                                                                          |                                  |                                  |                                  |
| Max. Input Short-Circuit Current (A)             | 48+48+48+48A                                                                                                                                                                                                          |                                  |                                  |                                  |
| Rated PV Input voltage (V)                       | 42.5V                                                                                                                                                                                                                 |                                  |                                  |                                  |
| Start-up Voltage (V)                             | 25Vdc                                                                                                                                                                                                                 |                                  |                                  |                                  |
| MPPT voltage range (V)                           | 20 ~ 55V                                                                                                                                                                                                              |                                  |                                  |                                  |
| No. of MPP Trackers/No. of Strings MPP Tracker   | 4/1+1+1+1                                                                                                                                                                                                             |                                  |                                  |                                  |
| AC Input/Output Data                             |                                                                                                                                                                                                                       |                                  |                                  |                                  |
| Rated AC Input/Output Active Power               | 800W                                                                                                                                                                                                                  | 1600W                            | 2000W                            | 2500W                            |
| Max. AC Input/Output Active Power                | 880W                                                                                                                                                                                                                  | 1760W                            | 2200W                            | 2750W                            |
| Max. off grid power                              | 2500W                                                                                                                                                                                                                 |                                  |                                  |                                  |
| Rated AC Input/Output Current (A)                | 3.7A / 3.5A                                                                                                                                                                                                           | 7.3A / 7.0A                      | 9.1A / 8.7A                      | 11.4A / 10.9A                    |
| Max. AC Input/Output Current (A)                 | 4A / 3.9A                                                                                                                                                                                                             | 8A / 7.7A                        | 10A / 9.6A                       | 12.5A / 12A                      |
| Peak Power (off-grid) (W)                        | 2 times of rated power,10s                                                                                                                                                                                            |                                  |                                  |                                  |
| AC Input / Output Frequency and Voltage          | 50Hz ( 45Hz ~ 55Hz ) , 60Hz ( 55Hz ~ 65Hz ) , L + N + PE , 220 / 230 Vac                                                                                                                                              |                                  |                                  |                                  |
| Power Factor Adjustment Range                    | 0.8 leading-0.8lagging                                                                                                                                                                                                |                                  |                                  |                                  |
| Max. Continuous AC Passthrough (grid to load)(A) | 30A                                                                                                                                                                                                                   |                                  |                                  |                                  |
| DC Injection Current                             | <0.5%In                                                                                                                                                                                                               |                                  |                                  |                                  |
| Efficiency                                       |                                                                                                                                                                                                                       |                                  |                                  |                                  |
| Max. Efficiency                                  | 96.5%                                                                                                                                                                                                                 |                                  |                                  |                                  |
| Euro Efficiency                                  | 96.0%                                                                                                                                                                                                                 |                                  |                                  |                                  |
| MPPT Efficiency                                  | >99%                                                                                                                                                                                                                  |                                  |                                  |                                  |
| Equipment Protection                             |                                                                                                                                                                                                                       |                                  |                                  |                                  |
| Integrated                                       | DC reverse polarity protection, AC Output Overcurrent Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection, Insulation Impedance detection, Anti-islanding protection |                                  |                                  |                                  |
| Surge Protection Level                           | TYPE II(DC),TYPE II(AC)                                                                                                                                                                                               |                                  |                                  |                                  |
| General Data                                     |                                                                                                                                                                                                                       |                                  |                                  |                                  |
| Max. Inverter Parallel NO.                       | 3 pcs (up to 7.5 kW rated output)                                                                                                                                                                                     |                                  |                                  |                                  |
| Communication Interface                          | Wi-Fi, Bluetooth , LoRa                                                                                                                                                                                               |                                  |                                  |                                  |
| Operating Temperature Range (°C)                 | -10°C ~ 55°C, >45°C Derating, (-20°C~55°C with heating, optional)                                                                                                                                                     |                                  |                                  |                                  |
| Permissible Altitude (m)                         | 2000m                                                                                                                                                                                                                 |                                  |                                  |                                  |
| Ingress Protection(IP) Rating                    | IP 65                                                                                                                                                                                                                 |                                  |                                  |                                  |
| Cabinet Size (W X H X D)                         | 560 × 330 × 210mm                                                                                                                                                                                                     |                                  |                                  |                                  |
| Weight (kg)                                      | 30kg                                                                                                                                                                                                                  |                                  |                                  |                                  |
| Permissible Ambient Humidity                     | 0% ~ 95% ( No Condensing )                                                                                                                                                                                            |                                  |                                  |                                  |
| Warranty                                         | 10 years                                                                                                                                                                                                              |                                  |                                  |                                  |
| Grid Regulation                                  | VDE 4105, IEC 61727/62116, VDE 0126, AS 4777.2, CEI 0-21, EN 50549-1, G98, C10-11, UNE 217002                                                                                                                         |                                  |                                  |                                  |
| Safety EMC/Standard                              | IEC 62619, UN38.3, IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1/2/3/4                                                                                                                                             |                                  |                                  |                                  |

| Supports up to 5 batteries for vertical stacking expansion and up to 8 clusters (40 batteries) via cable connection |                                                 |
|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
|                                                                                                                     |                                                 |
| Model                                                                                                               | AE-F2.56                                        |
| Battery Technical Specification                                                                                     |                                                 |
| Battery Chemistry                                                                                                   | LiFePO <sub>4</sub>                             |
| Battery Nominal Voltage                                                                                             | 51.2V                                           |
| Battery Nominal Energy                                                                                              | 2560Wh                                          |
| Max. Charging / Discharging Current                                                                                 | 50A                                             |
| Battery Operating Voltage                                                                                           | 44.8V ~ 57.6V                                   |
| Battery Cycle Life                                                                                                  | ≥6,000 (@25°C±2°C, 70%EOL)                      |
| Max. Stack NO.                                                                                                      | 5 pcs (up to 12.8kWh )                          |
| Parallel Capability                                                                                                 | 40 pcs*                                         |
| Other Technical Specification                                                                                       |                                                 |
| Display                                                                                                             | LED ( SOC, Alarm )                              |
| Communication Interfaces                                                                                            | LoRa                                            |
| Dimension ( W × D × H ) (mm)                                                                                        | 450 × 210 × 244 (without terminal)              |
| Ingress Protection(IP) Rating                                                                                       | IP 65                                           |
| Weight Approximate                                                                                                  | 22±3 kg                                         |
| Operating Temperature Range                                                                                         | -10°C~55°C ( -20°C~55°C with heating, optional) |
| Max. Operating Altitude                                                                                             | 2,000m                                          |
| Relative Humidity                                                                                                   | 0% ~ 95% ( No Condensing )                      |
| Certification                                                                                                       | UN38.3, IEC 62619, CE                           |
| Installation Style                                                                                                  | Floor-Mounted, Stacked-Mounted                  |
| Warranty                                                                                                            | 10 years                                        |

\*Maximum 40 Pieces AE-F2.56 Packs in Parallel, Up to 102.4kWh.

Autumn Series  
Residential ESS Solution

Stacked Battery (LV)



Reverse Polarity Protection

- Prevents battery or BMS damage from incorrect wiring

Thermal Protection

- Prevents thermal runaway with high-precision temperature sensor

Current-limiting Charging

- Supports parallel connection and auto-recharges after deep discharge

Flexible Expansion

- Max.4 packs in series and Max. 10 units in parallel

Automatic Recovery Function

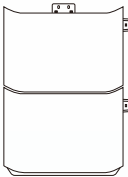
- Keeps battery stable at low-voltage, minimum cold-start capability of 5V

External Power Support

- Solar recharging, avoid battery standby, allow direct recharge

WD-G12100&WD-G12200&WD-G24100  
(AS, AF, LATAM)

Technical Data



Main Parameters

| Model                            |                 | WD-G12100                                                      | WD-G12200       | WD-G24100       |
|----------------------------------|-----------------|----------------------------------------------------------------|-----------------|-----------------|
| Battery Chemistry                |                 | LiFePO <sub>4</sub>                                            |                 |                 |
| Nominal Capacity <sup>[1]</sup>  |                 | 100 Ah                                                         | 200 Ah          | 100 Ah          |
| Nominal Voltage                  |                 | 12.8 V                                                         |                 |                 |
| Operating Voltage                |                 | 11.2 V ~ 14.6 V                                                |                 |                 |
| Nominal Energy <sup>[1]</sup>    |                 | 1.28 kWh                                                       | 2.56 kWh        | 2.56 kWh        |
| Cell Configuration               |                 | Prismatic, 1P4S                                                | Prismatic, 2P4S | Prismatic, 1P8S |
| Scalability                      |                 | Max. 4 units in series ( 51.2V ) and Max. 10 units in parallel |                 |                 |
| Charge Current <sup>[2]</sup>    | Max. Continuous | 100 A                                                          | 200 A           | 100 A           |
|                                  | Peak            | 200 A (10 sec)                                                 | 300 A (10 sec)  | 200 A (10 sec)  |
| Discharge Current <sup>[2]</sup> | Max. Continuous | 100 A                                                          | 200 A           | 100 A           |
|                                  | Peak            | 200 A (10 sec)                                                 | 300 A (10 sec)  | 200 A (10 sec)  |

Other Parameters

|                                    |  |                                                                   |                 |                 |
|------------------------------------|--|-------------------------------------------------------------------|-----------------|-----------------|
| Recommend Depth of Discharge       |  | 80% DOD                                                           |                 |                 |
| Dimension Approximate ( W×D×H, mm) |  | 310 × 160 × 298                                                   | 471 × 160 × 348 | 471 × 160 × 348 |
| Weight Approximate                 |  | 13 kg                                                             | 22 kg           | 21 kg           |
| Case Material                      |  | ABS+PC                                                            |                 |                 |
| LED Indicator                      |  | LED ( SOC, working, protecting ) & Buzzer                         |                 |                 |
| Communication                      |  | RS485                                                             |                 |                 |
| IP Rating of Enclosure             |  | IP20                                                              |                 |                 |
| Operating Temperature              |  | Charge : 0 ~ 55°C, Discharge : -20°C ~ 55°C                       |                 |                 |
| Storage Temperature                |  | 0 ~ 35°C                                                          |                 |                 |
| Relative Humidity                  |  | 95%                                                               |                 |                 |
| Altitude                           |  | ≤2000m                                                            |                 |                 |
| Cycle Life                         |  | ≥6000 ( 25°C±2°C, 0.2C charging and discharging, 80%DOD, 70%EOL ) |                 |                 |
| Warranty Period                    |  | 5 years                                                           |                 |                 |
| Installation                       |  | Floor-Mounted, Stacked                                            |                 |                 |
| Certification                      |  | UN38.3, CB, MSDS                                                  |                 |                 |

[1] Test conditions : 25°C±2°C, at beginning of life and calibration mode, 0.2C charge & 0.2C discharge, 100% DOD.

[2] The current is affected by temperature and SOC.

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# WIN TER

Series

## C&I ESS Solution

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Winter Series  
C&I ESS Solution

# NEW ORION 522



### Intelligent Cloud Platform

- 24-hour online O&M
- Battery life and safety warning
- Device cloud interconnection



### Ultimate Safety

- 4 Fire Protection System
- 3+3 Electrical Safety Safeguards
- AC Leakage & DC Insulation Detection
- High-voltage interlocking, preventing loaded arc operation



### Versatile Expansion

- PCS/BMS/EMS All-in-one modular design
- Support up to 10 cabinets in parallel
- Support 2/4/6/8-hour energy storage applications
- Higher energy density to reduce footprint
- PV and BESS DC Coupling



### Multiple Application Scenarios

- Peak-to-Valley arbitrage/Peak-to-Valley shifting
- Virtual power plant ready
- Off-grid operation (Islands, communication base stations, etc.)

## MC-L522-2H2/3 (EU, AS, AF, LATAM) MC-L522-BC-2/3 (EU, AS, AF, LATAM)

### Technical Data

| Model                     | MC-L522-2H2/3 ( AC BESS )    |
|---------------------------|------------------------------|
| System Parameters         |                              |
| Operating Temperature     | -30°C ~ 55°C(≥40°C Derating) |
| Storage Temperature       | -30°C ~ 60°C                 |
| Humidity                  | 0 ~ 95% ( No Condensation )  |
| Type of cooling           | Liquid Cooling               |
| Fire Suppression          | Aerosol, Water               |
| Ingress Protection        | IP54                         |
| Anticorrosion grade       | ≥C4                          |
| Altitude                  | ≤3000m                       |
| Communication             | RS485, Modbus TCP, DIDO      |
| Weight                    | ≤5500kg                      |
| Dimensions ( W × D × H )  | 2000 × 1400 × 2440mm         |
| DC Data                   |                              |
| Battery                   | LiFePO <sub>4</sub>          |
| Nominal Capacity          | 314Ah                        |
| Nominal Energy            | 522.496kWh                   |
| Nominal DC Voltage        | 832Vd.c.                     |
| DC Voltage Range          | 715~936Vd.c                  |
| Charge and discharge rate | 0.5P                         |
| AC Data                   |                              |
| Nominal AC Voltage        | 380/400V 3L+N+PE             |
| Rated Frequency           | 50 / 60Hz                    |
| Rated Power               | 250kW                        |
| Maximum Power             | 250kW                        |
| Power Factor              | -1~1                         |

| Model                     | MC-L522-BC-2/3 ( DC BESS )  |
|---------------------------|-----------------------------|
| System Parameters         |                             |
| Operating Temperature     | -30°C ~ +55°C               |
| Storage Temperature       | -30°C ~ +60°C               |
| Humidity                  | 0 ~ 95% ( No Condensation ) |
| Type of cooling           | Liquid Cooling              |
| Fire Suppression          | Aerosol, Water              |
| Ingress Protection        | IP54                        |
| Anticorrosion grade       | ≥C4                         |
| Altitude                  | ≤3000m                      |
| Communication             | RS485, Modbus TCP, DIDO     |
| Weight                    | ≤5100kg                     |
| Dimensions ( W × D × H )  | 2000 × 1400 × 2190mm        |
| DC Data                   |                             |
| Battery                   | LiFePO <sub>4</sub>         |
| Nominal Capacity          | 314Ah                       |
| Nominal Energy            | 522.496kWh                  |
| Nominal DC Voltage        | 832Vd.c.                    |
| DC Voltage Range          | 715~936Vd.c                 |
| Charge and discharge rate | 0.5P                        |

MC-L522-2H2/3 (EU, AS, AF, LATAM)

MC-L522-BC-2/3 (EU, AS, AF, LATAM)

Technical Data

| Model                                  | MS-TS500-2-A      |
|----------------------------------------|-------------------|
| Grid/PCS Side                          |                   |
| Rated AC Input/Output Active Power(kW) | 500               |
| Rated AC Input/Output Current(A)       | 758/725           |
| Rated Input/Output Voltage(V)          | 220/380, 230/400  |
| Grid Connection Form                   | 3L/N/PE           |
| Rated Input/Output Grid Frequency      | 50Hz/60Hz         |
| Load Side Data                         |                   |
| Rated Output Active Power(kW)          | 500               |
| Rated Output Current(A)                | 758/725           |
| Rated Output Voltage(V)                | 220/380,230/400   |
| Grid Connection Form                   | 3L/N/PE           |
| Rated Output Grid Frequency            | 50Hz/60Hz         |
| GEN Side Data                          |                   |
| Rated AC Input Active Power(kW)        | 500               |
| Rated AC Input Current(A)              | 758/725           |
| Rated Input Voltage(V)                 | 220/380, 230/400  |
| Grid Connection Form                   | 3L/N/PE           |
| Rated Input Grid Frequency             | 50Hz/60Hz         |
| System Data                            |                   |
| Off Grid Switching Time                | ≤10ms             |
| Operating Temperature Range            | -20°C~55°C        |
| Permissible Altitude                   | ≤3000m            |
| Ingress Protection (IP) Rating         | IP54              |
| Cabinet Size (W*H*D) [mm]              | 1000 X 2250 X1000 |
| Weight [kg]                            | ≤700kg            |



| Model                            | MS-EMS                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System                           |                                                                                                                                                                                                                                                                                                                                                             |
| Configuration                    | EMS controller, lightning protection module, switch power supply, UPS module, switch                                                                                                                                                                                                                                                                        |
| Function                         | Basic functions : peak valley arbitrage, anti backflow, main transformer overload protection, load tracking, demand control, backup power function, phase separation control, SOC balancing, Deye Cloud monitoring<br>Advanced features : load forecasting, production planning, electricity price planning, optimal economic curve                         |
| Communicate                      |                                                                                                                                                                                                                                                                                                                                                             |
| Ethernet ( 5 Channels )          | 10 / 100 / 1000 Mbps                                                                                                                                                                                                                                                                                                                                        |
| Fiber optic port ( 2 Channels )  | 1Gbps                                                                                                                                                                                                                                                                                                                                                       |
| USB ( 2 Channels )               | Host                                                                                                                                                                                                                                                                                                                                                        |
| CAN ( 3 Channels )               | Isolation, with 2 Channels Supporting CAN-FD                                                                                                                                                                                                                                                                                                                |
| RS485 ( 8 Channels )             | Isolation                                                                                                                                                                                                                                                                                                                                                   |
| RS232 ( 3 Channels )             | 2 Isolated Channels, 1 non Isolated Debugging Channel ( DB9 Socket )                                                                                                                                                                                                                                                                                        |
| TF Card ( 1 Channel )            | Standard TF Card Holder                                                                                                                                                                                                                                                                                                                                     |
| LVDS ( 1 Channel )               | The Physical Interface is DVI ( Including 1 USB for Touch )                                                                                                                                                                                                                                                                                                 |
| M. 2 Interfaces ( 1 Channel )    | PCIe2.0 X1, Scalable SSD ( Standard 1TB )                                                                                                                                                                                                                                                                                                                   |
| MiniPCle Interface ( 1 Channel ) | 4G Card With Expandable USB Communication Protocol ( Standard )                                                                                                                                                                                                                                                                                             |
| Nano SIM Interface ( 1 Channel ) | Used in Conjunction with the Minipcie Expansion 4G Module                                                                                                                                                                                                                                                                                                   |
| DI ( 17 Channels )               | Optocoupler Isolation                                                                                                                                                                                                                                                                                                                                       |
| DO ( 8 Channels )                | Relay Isolation                                                                                                                                                                                                                                                                                                                                             |
| WLAN                             | 802.11 b / AC g n, HT 20 / 40, 2.4 GHz 5 GHz                                                                                                                                                                                                                                                                                                                |
| 4G Antenna                       | Support Multi Country Frequency Bands                                                                                                                                                                                                                                                                                                                       |
| Power Supply                     |                                                                                                                                                                                                                                                                                                                                                             |
| Communication Input              | 220Vac                                                                                                                                                                                                                                                                                                                                                      |
| DC In                            | 24Vdc                                                                                                                                                                                                                                                                                                                                                       |
| UPS Backup Power                 | 24Vdc                                                                                                                                                                                                                                                                                                                                                       |
| Consumption                      | Max 25W                                                                                                                                                                                                                                                                                                                                                     |
| Environmental Parameters         |                                                                                                                                                                                                                                                                                                                                                             |
| Operation Temperature            | -15°C ~ +50°C                                                                                                                                                                                                                                                                                                                                               |
| Storage Temperature              | -15°C ~ +50°C                                                                                                                                                                                                                                                                                                                                               |
| Working Humidity                 | 5% ~ 95%                                                                                                                                                                                                                                                                                                                                                    |
| Max. Working Altitude ( m )      | ≤3000m                                                                                                                                                                                                                                                                                                                                                      |
| IP Rating of Enclosure           | IP54                                                                                                                                                                                                                                                                                                                                                        |
| Anti-Corrosion Grade             | ≥C4                                                                                                                                                                                                                                                                                                                                                         |
| Mechanical Parameters            |                                                                                                                                                                                                                                                                                                                                                             |
| Dimension ( W × D × H, mm )      | 488 × 188 × 588                                                                                                                                                                                                                                                                                                                                             |
| Weight Appr. ( kg )              | ≤24.5kg                                                                                                                                                                                                                                                                                                                                                     |
| Installation Location            | Indoor or Outdoor, Wall-mounted                                                                                                                                                                                                                                                                                                                             |
| Box Material                     | Metal                                                                                                                                                                                                                                                                                                                                                       |
| Incoming Specifications          | AC power cord : Recommended wire diameter 1.5mm <sup>2</sup><br>DC power cord : Recommended wire diameter of 1.5mm <sup>2</sup><br>Eight core Ethernet cable: Recommended CAT5e Ethernet cable<br>RS485 : Recommended 0.75mm <sup>2</sup> ~1.5mm <sup>2</sup> outdoor UV protection with shielding layer twisted pair cable length<1000m ( baud rate 9600 ) |



Winter Series  
C&I PV-BESS-EV Charging  
Integrated Solution

# NEW ORION 480



## Intelligent Cloud Platform

- Customizable load algorithmic modules
- 24-hour online O&M
- Battery life and safety warning
- Device cloud interconnection



## Ultimate Safety

- 4 Fire Protection System
- 3+3 Electrical Safety Safeguards
- AC Leakage & DC Insulation Detection
- High-voltage interlocking, preventing loaded arc operation



## Versatile Expansion

- PCS/BMS/EMS All-in-one modular design
- Support up to 10 cabinets in parallel
- Support 2/4/6/8-hour energy storage applications
- Higher energy density to reduce footprint
- PV and BESS DC Coupling



## Multiple Application Scenarios

- Peak-to-Valley arbitrage/Peak-to-Valley shifting
- Virtual power plant ready
- Off-grid operation (Islands, communication base stations, etc.)

# MC-LC480-2H2 & MC-LC480-BC-2 (EU, AS, AF, LATAM) MS-DC480-2 & MS-DCC180-2 (EU, AS, AF, LATAM) MS-MPPT-400/200-2 (EU, AS, AF, LATAM)

## Technical Data

| Model                     | MC-LC480-2H2 (AC BESS)                                                   |
|---------------------------|--------------------------------------------------------------------------|
| System Parameters         |                                                                          |
| Operating Temperature     | -25°C ~ 55°C                                                             |
| Storage Temperature       | -30°C ~ 60°C                                                             |
| Humidity                  | 0 ~ 95%                                                                  |
| Type of cooling           | Liquid Cooling                                                           |
| Fire Suppression          | Aerosol, Water                                                           |
| Ingress Protection        | Overall IP54 (Battery compartment, Chiller control box: IP55; PCS: IP65) |
| Anticorrosion grade       | C4-M (Optional C5)                                                       |
| Altitude                  | ≤2000m                                                                   |
| Communication             | RS485, Modbus TCP, DIDO                                                  |
| Weight                    | ≤5100kg                                                                  |
| Dimensions ( W × D × H )  | 2000 × 1350 × 2480mm (Without Air Outlet Cover)                          |
| DC Data                   |                                                                          |
| Battery                   | LiFePO <sub>4</sub>                                                      |
| Nominal Capacity          | 314Ah                                                                    |
| Nominal Energy            | 482.304kWh                                                               |
| Nominal DC Voltage        | 768Vd.c.                                                                 |
| DC Voltage Range          | 648Vd.c ~ 876Vd.c                                                        |
| Charge and discharge rate | Charge 0.4P, Discharge 0.9P                                              |
| AC Data                   |                                                                          |
| Nominal AC Voltage        | 380/400V 3P+N+PE                                                         |
| Rated Frequency           | 50 / 60Hz                                                                |
| Rated Power               | 200kW                                                                    |
| Maximum Power             | 220kW ( 1.1 Times of Rated Power )                                       |
| Power Factor              | -1~1                                                                     |

| Model                     | MC-LC430-BC-2 ( DC BESS )                                     |
|---------------------------|---------------------------------------------------------------|
| System Parameters         |                                                               |
| Operating Temperature     | -25°C ~ 55°C                                                  |
| Storage Temperature       | -30°C ~ 60°C                                                  |
| Humidity                  | 0 ~ 95%                                                       |
| Type of cooling           | Liquid Cooling                                                |
| Fire Suppression          | Aerosol, Water                                                |
| Ingress Protection        | Overall IP54 (Battery compartment, Chiller control box: IP55) |
| Anticorrosion grade       | C4-M (C5M is optional)                                        |
| Altitude                  | ≤2000m                                                        |
| Communication             | RS485, Modbus TCP, DIDO                                       |
| Weight                    | ≤4800kg                                                       |
| Dimensions ( W × D × H )  | 2000 × 1350 × 2480mm                                          |
| DC Data                   |                                                               |
| Battery                   | LiFePO <sub>4</sub>                                           |
| Nominal Capacity          | 314Ah                                                         |
| Nominal Energy            | 482.304kWh                                                    |
| Nominal DC Voltage        | 768Vd.c.                                                      |
| DC Voltage Range          | 648Vd.c ~ 876Vd.c.                                            |
| Charge and discharge rate | Charge 0.4P, Discharge 0.9P                                   |

MC-LC480-2H2 & MC-LC480-BC-2 (EU, AS, AF, LATAM)  
MS-DC480-2 & MS-DCC180-2 (EU, AS, AF, LATAM)  
MS-MPPT-400/200-2 (EU, AS, AF, LATAM)

Technical Data

| Model                              | MS-DC480-2 ( 480kW DC charge power cabinet )                                                                                                               |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC Input Data                      |                                                                                                                                                            |
| Input standard                     | DC+ / DC- / PE                                                                                                                                             |
| DC input voltage range             | 200Vdc ~ 850Vdc                                                                                                                                            |
| DC input current range             | ≤667A                                                                                                                                                      |
| DC rated input power               | 480kW @400Vdc≤Vin≤850Vdc                                                                                                                                   |
| DC Output Data                     |                                                                                                                                                            |
| DC output voltage range            | 150Vdc ~ 1000Vdc                                                                                                                                           |
| DC output current range            | 8 branches, max 250A each                                                                                                                                  |
| Environmental Conditions           |                                                                                                                                                            |
| Operating Temperature Range ( °C ) | -30°C to +55°C ( derating above 55°C)                                                                                                                      |
| Storage Temperature ( °C )         | -40°C to +60°C                                                                                                                                             |
| Humidity                           | ≤ 95%RH, no condensation                                                                                                                                   |
| Cooling                            | Forced air cooling                                                                                                                                         |
|                                    | ≤ 2000 m                                                                                                                                                   |
| Altitude                           | (No derating required foroperation >1000m:Set the actual altitude value;<br>the working temperature decreases-by 1°C for-every 100 m increase-in altitude) |
| IP Rating of Enclosure             | ≥IP54                                                                                                                                                      |
| Other Parameters                   |                                                                                                                                                            |
| Efficiency                         | ≥ 97.5%, @ peak full load                                                                                                                                  |
| Dimension ( W × H × D, mm )        | 1250mm× 2450mm (without eyebolt)× 1000mm                                                                                                                   |
| Approximate Weight ( kg )          | 1200kg                                                                                                                                                     |

| Model                              | MS-DCC180-2 ( DC charging terminal )                                                       |
|------------------------------------|--------------------------------------------------------------------------------------------|
| DC Input Data                      |                                                                                            |
| DC Input Voltage Range ( V )       | 150~1000Vd.c. 500A max                                                                     |
| Input number                       | 2 DC inputs                                                                                |
| DC Output Data                     |                                                                                            |
| Output interface                   | 1 pile 2 guns, each gun 180kW charging power, support the CCS2 charging standard interface |
| DC Output range                    | 150~1000Vd.c. 500A~max                                                                     |
| Max. Output Power ( W )            | 360kW(2*180kW).                                                                            |
| Max. Output Current                | Single gun Max.250A                                                                        |
| Environmental Conditions           |                                                                                            |
| Operating Temperature Range ( °C ) | -30°C to +55°C ( derating above 50°C)                                                      |
| Storage Temperature ( °C )         | -40°C to +60°C                                                                             |
| Humidity                           | ≤ 95%RH, no condensation                                                                   |
| Cooling                            | Natural cooling                                                                            |
| Altitude                           | ≤2000m                                                                                     |
| IP Rating of Enclosure             | IP54                                                                                       |
| Other Parameters                   |                                                                                            |
| Dimension ( W × H × D, mm )        | 1100 mm x 2200 mm (without GPS & 4G antenna) x 400mm                                       |
| Approximate Weight ( kg )          | 280kg                                                                                      |

| Model                                       | MS-MPPT400-2                |
|---------------------------------------------|-----------------------------|
| System Parameters                           |                             |
| Dimension ( W × D × H, mm )                 | 1000 × 1000 × 2480          |
| Weight Appr. ( kg )                         | ≤950kg                      |
| System Operating temperature range          | -30°C ~ 45°C                |
| Max. working altitude ( m )                 | ≤2000m                      |
| IP Rating of Enclosure                      | IP54                        |
| STS Parameters                              |                             |
| Rated insulation voltage ( V )              | DC1000                      |
| Rated working voltage ( V )                 | AC400                       |
| Auxiliary equipment operating voltage ( V ) | AC220, DC24                 |
| Frequency                                   | 50/60Hz                     |
| Rated power of load ( kW )                  | 250                         |
| Rated power of the power grid ( kW )        | 500                         |
| Rated power of oil engine ( kW )            | 500                         |
| Switching Time                              | ≤10ms                       |
| MPPT Parameters                             |                             |
| No. of MPPT                                 | 2                           |
| Max. PV Access Power (kW)                   | 400(200*2)                  |
| Max. PV Input Power (kW)                    | 320(2*160)                  |
| Max. PV Input Voltage ( V )                 | 800                         |
| Start-up Voltage ( V )                      | 200                         |
| MPPT Voltage Range ( V )                    | 180 ~ 750                   |
| Full Load MPPT Voltage Range ( V )          | 450 ~ 750                   |
| Rated PV Input Voltage ( V )                | 600                         |
| Max. Operating PV Input Current ( A )       | 2*(40+40+40+40+40+40+40+40) |
| Max. Input Short-Circuit Current ( A )      | 2*(60+60+60+60+60+60+60+60) |
| No.of MPP Trackers                          | 16 (2*8)                    |
| Max. Efficiency                             | >99%                        |
| MPPT Efficiency                             | >99.9%                      |
| Model                                       | MS-MPPT200-2                |
| PV String Input Data                        |                             |
| Max. PV Access Power (kW)                   | 200                         |
| Max. PV Input Power (kW)                    | 160                         |
| Max. PV Input Voltage (V)                   | 800                         |
| Start-up Voltage (V)                        | 200                         |
| MPPT Voltage Range (V)                      | 180-750                     |
| Full Load MPPT Voltage Range ( V )          | 450-750                     |
| Rated PV Input Voltage ( V )                | 600                         |
| Max. Operating PV Input Current (A)         | 40+40+40+40+40+40+40+40     |
| Max. Input Short-Circuit Current (A)        | 60+60+60+60+60+60+60+60     |
| No. of MPP Trackers                         | 8                           |
| Efficiency                                  |                             |
| Max. Efficiency                             | >99%                        |
| MPPT Efficiency                             | >99.9%                      |
| Equipment Protection                        |                             |
| DC input reverse protection                 | YES                         |
| DC ARC protection                           | Optional                    |
| Anti-PID(Potential Induced Degradation)     | Optional                    |
| DC Switch                                   | YES                         |
| Surge Protection Level                      | TYPE II                     |
| General Data                                |                             |
| Ingress Protection(IP) Rating               | IP65                        |
| Over Voltage Category                       | OVC I                       |
| Cabinet Size[W×H×D] (mm)                    | 543x198x700                 |
| Weight (kg)                                 | 70                          |
| Type Of Cooling                             | Intelligent air cooling     |
| Safety EMC/Standard                         | IEC/EN 62109-1              |
| DC Output Data                              |                             |
| DC Output Voltage Range(V)                  | 630-1000                    |
| Max. DC Output Current(A)                   | 200                         |

Winter Series  
Utility-Scale ESS Solution

Air-Cooled ESS

MAGNUS 2000



Advanced Safety

- 2-hour fire resistance
- Combustible gas detection, smoke evacuation, aerosol extinguishers, water sprinklers



Integrated Technology

- LC, PCS, MPPT, and battery integrated
- EMS for system management
- ATS for on/off-grid switching
- 1 MW PCS output, 1.6 MWp solar input
- System energy capacity: 2057 kWh



Applications

- Support black start function
- Support off-grid operation & back up
- Support peak shaving
- Transformer capacity control



Performance

- 1.1x overload, 1.5x overload
- System Operating Conditions :  
-20°C ~ 55°C | IP54 | C4-M
- Supports 2 PCS & 2 MW off-grid

WS-G(s)2000-2H3/WS-G(s)2000-4H3 (AS, AF, LATAM, EU)

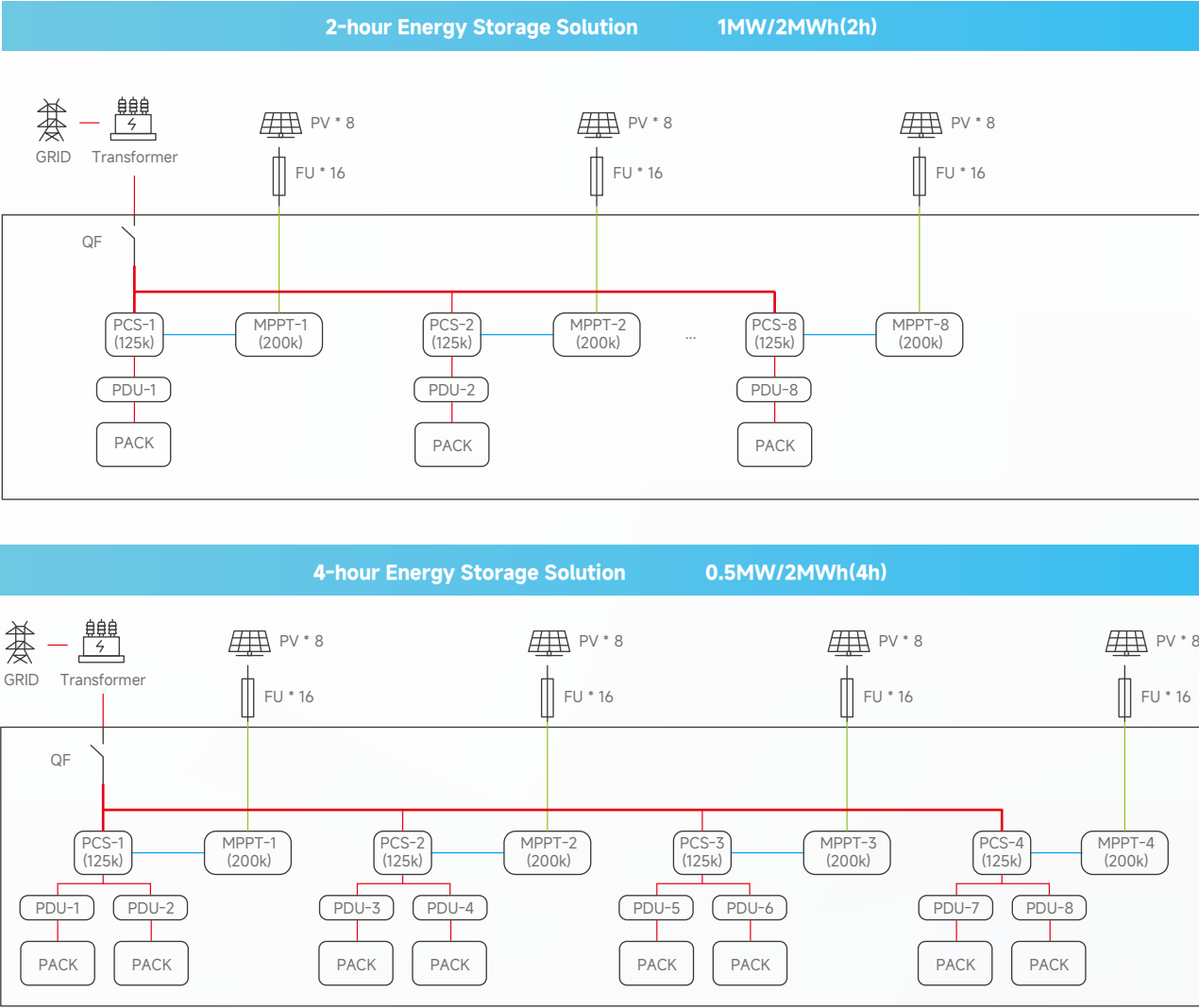
Technical Data

| Model                                    | WS-GS2000-2H3                             | WS-G2000-2H3 |
|------------------------------------------|-------------------------------------------|--------------|
| AC Parameter                             |                                           |              |
| Rated power                              | 1000kW                                    |              |
| Max. Apparent Power                      | 1100kVA                                   |              |
| AC Rated Current                         | 1443A(8×180.4A)                           |              |
| Rated Voltage/Range                      | 400V/0.85Un~1.1Un                         |              |
| Grid Connection Form                     | 3L+N+PE                                   |              |
| Frequency/Range                          | 50Hz/45Hz~55Hz                            |              |
| Power Factor Adjustment Range            | -1 ~ +1                                   |              |
| Total Current Harmonic Distortion (THDi) | <3% (of Rated power)                      |              |
| DC Injection Current                     | <0.5% In                                  |              |
| Max.RTE                                  | 86%                                       |              |
| Battery Parameter                        |                                           |              |
| Cell Type                                | LFP                                       |              |
| Nominal Capacity ( Cell )                | 314Ah                                     |              |
| PACK Configuration                       | 1P16S                                     |              |
| Battery Configuration                    | 256S1P*8                                  |              |
| Battery Energy                           | 2057kWh                                   |              |
| Battery Voltage Range                    | 819.2Vdc(691.2~921.6Vdc)                  |              |
| Other Parameter                          |                                           |              |
| Fire Protect System                      | Gas fire protection+Water fire protection |              |
| Cooling Type                             | Air cooling                               |              |
| Communication Port                       | RJ45                                      |              |
| Communication Protocol                   | Modbus TCP, IEC104, IEC61850              |              |
| Operating Ambient                        | -20~55 °C                                 |              |
| Humidity                                 | 0%-90%RH                                  |              |
| Altitude                                 | 3000m                                     |              |
| IP Rating of Enclosure                   | IP54                                      |              |
| Anti-corrosion Level                     | C4-M                                      |              |
| Seismic Grade                            | Moderate performance level (0.5g)         |              |
| Dimension (W/D/H,mm)                     | 6058 x 2438 x 2896 mm                     |              |
| Weight Approximate (kg)                  | ≤26000kg                                  |              |
| Installation Location                    | Floor mount                               |              |
| Recommend Storage Temperature (°C)       | -20~60                                    |              |
| PV Parameter                             |                                           |              |
| Max. PV Input Power                      | 1280kW(160kW*8)                           | /            |
| Max. PV Input Voltage                    | 800Vdc                                    | /            |
| Start-up Voltage                         | 200Vdc                                    | /            |
| MPPT Voltage Range                       | 180~750Vdc                                | /            |
| Full Load MPPT Voltage Range             | 450~750Vdc                                | /            |
| Rated PV Input Voltage                   | 600Vdc                                    | /            |
| Max. Operating PV Input Current          | 8 × (40+40+40+40+40+40+40+40) A           | /            |
| Max. Input Short-Circuit Current         | 8 × (60+60+60+60+60+60+60+60) A           | /            |
| No. of MPP Trackers                      | 64 (8*8)                                  | /            |
| Max. Efficiency                          | >99%                                      | /            |

WS-G(s)2000-2H3/WS-G(s)2000-4H3 (AS, AF, LATAM, EU)

Technical Data

| Model                                    | WS-GS2000-4H3                             | WS-G2000-4H3 |
|------------------------------------------|-------------------------------------------|--------------|
| AC Parameter                             |                                           |              |
| Rated power                              | 500kW                                     |              |
| Max. Apparent Power                      | 550kVA                                    |              |
| AC Rated Current                         | 722A(8×180.4A)                            |              |
| Rated Voltage/Range                      | 400V/0.85Un-1.1Un                         |              |
| Grid Connection Form                     | 3L+N+PE                                   |              |
| Frequency/Range                          | 50Hz/45Hz-55Hz                            |              |
| Power Factor Adjustment Range            | -1 ~ +1                                   |              |
| Total Current Harmonic Distortion （THDi） | <3% (of Rated power)                      |              |
| DC Injection Current                     | <0.5% In                                  |              |
| Max.RTE                                  | 86%                                       |              |
| Battery Parameter                        |                                           |              |
| Cell Type                                | LFP                                       |              |
| Nominal Capacity ( Cell )                | 314Ah                                     |              |
| PACK Configuration                       | 1P16S                                     |              |
| Battery Configuration                    | 256S1P*8                                  |              |
| Battery Energy                           | 2057kWh                                   |              |
| Battery Voltage Range                    | 819.2Vdc(691.2~921.6Vdc)                  |              |
| Other Parameter                          |                                           |              |
| Fire Protect System                      | Gas fire protection+Water fire protection |              |
| Cooling Type                             | Air cooling                               |              |
| Communication Port                       | RJ45                                      |              |
| Communication Protocol                   | Modbus TCP, IEC104, IEC61850              |              |
| Operating Ambient                        | -20-55 °C                                 |              |
| Humidity                                 | 0%-90%RH                                  |              |
| Altitude                                 | 3000m                                     |              |
| IP Rating of Enclosure                   | IP54                                      |              |
| Anti-corrosion Level                     | C4-M                                      |              |
| Seismic Grade                            | Moderate performance level (0.5g)         |              |
| Dimension (W/D/H,mm)                     | 6058 x 2438 x 2896 mm                     |              |
| Weight Approximate (kg)                  | ≤26000kg                                  |              |
| Installation Location                    | Floor mount                               |              |
| Recommend Storage Temperature (°C)       | -20~60                                    |              |
| PV Parameter                             |                                           |              |
| Max. PV Input Power                      | 640kW(160kW*4)                            | /            |
| Max. PV Input Voltage                    | 800Vdc                                    | /            |
| Start-up Voltage                         | 200Vdc                                    | /            |
| MPPT Voltage Range                       | 180-750Vdc                                | /            |
| Full Load MPPT Voltage Range             | 450-750Vdc                                | /            |
| Rated PV Input Voltage                   | 600Vdc                                    | /            |
| Max. Operating PV Input Current          | 4× (40+40+40+40+40+40+40) A               | /            |
| Max. Input Short-Circuit Current         | 4× (60+60+60+60+60+60+60+60) A            | /            |
| No. of MPP Trackers                      | 32 (4*8)                                  | /            |
| Max. Efficiency                          | >99%                                      | /            |



Winter Series  
Utility-Scale ESS Solution

Liquid - Cooled ESS

MAGNUS 4300

WS-L4300-BC-3-A (AS, AF, LATAM, EU)  
WS-PCS1125-2-A & WS-TS1000-2-A (AS, AF, LATAM, EU)



### Ultimate Safety

- 3+3 Fire Protection System
- 3+3 Electrical Safety Safeguards
- AC Leakage & DC Insulation detection
- High-Voltage Interlock



### Versatile Applications

- Peak Shaving & Energy Arbitrage
- Virtual Power Plant (VPP) Ready
- Off-Grid & Microgrid Capable
- PV and BESS DC Coupling
- Hybrid Solar-BESS-Diesel Systems



### High Energy Density

- 4300kWh in 20' BESS container
- 1125kW PCS, 1800kW PV in Mppt Stacked Module



### Seamless Scalability

- Modular Architecture
- Flexible 2/4h Energy Storage Solutions
- Compact Design, High Energy Density



### Smart Cloud Management

- AI-Powered Load Optimization
- 24/7 Remote Monitoring & O&M
- Real-Time Battery Health & Safety Alerts
- Cloud-Connected Ecosystem



### Cluster Management

- One Cluster Management, High Availability, More Friendly to the Cell

PV-BESS DC-Coupled Solution

The diagram illustrates a PV-BESS DC-Coupled Solution. It shows a PV array connected to a WS-L4300-BC-3 BESS container. The BESS container is connected to a WS-PCS1125-2-A PCS container, which is then connected to a WS-TS1000-2-A TS container. The TS container is connected to a Transformer, which is connected to the GRID. A Generator is also connected to the Transformer. The TS container is also connected to Loads.

PV-BESS AC-Coupled Solution

The diagram illustrates a PV-BESS AC-Coupled Solution. It shows a PV array connected to a WS-L4300-BC-3 BESS container. The BESS container is connected to a WS-PCS1125-2-A PCS container, which is then connected to a WS-TS1000-2-A TS container. The TS container is connected to a Transformer, which is connected to the GRID. A Generator is also connected to the Transformer. The TS container is also connected to Loads. A SUN-100K-G03 inverter is connected to the PV array.

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POWERING YOUR LIFE

POWERING YOUR LIFE

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WS-L4300-BC-3-A (AS, AF, LATAM, EU)

WS-PCS1125-2-A & WS-TS1000-2-A (AS, AF, LATAM, EU)

Technical Data

| Liquid-Cooled ESS                   |                             |
|-------------------------------------|-----------------------------|
| Model                               | WS-L4300-BC-3-A             |
| DC Battery                          |                             |
| Battery Type                        | LiFePO <sub>4</sub>         |
| Nominal Capacity ( Cell )           | 314Ah                       |
| Nominal Energy                      | 4340kWh                     |
| PACK Configuration                  | 1P48S                       |
| RACK Configuration                  | 18 × 1P240S                 |
| Nominal DC Voltage                  | 768Vdc                      |
| DC Voltage Range                    | 648Vdc ~ 876Vdc             |
| Charge and discharge rate           | ≤0.5P                       |
| Max. Charging / Discharging Current | 3150A ( 18 × 175A )         |
| No. of DC Output                    | 18                          |
| System                              |                             |
| Operating Temperature               | -30°C ~ +55°C               |
| Storage Temperature                 | -30°C ~ +60°C               |
| Humidity                            | 0 ~ 95% ( No condensation ) |
| Type of cooling                     | Liquid cooling              |
| Fire Suppression                    | Aerosol、Water               |
| Ingress Protection                  | IP55                        |
| Anticorrosion grade                 | C4-M (Optional C5)          |
| Altitude                            | ≤2000m                      |
| Communication                       | CAN、RS485、TCP、DIDO          |
| Weight                              | 38000kg                     |
| Dimensions ( W × D × H )            | 6058 × 2438 × 2896mm        |



| Model                               | WS-PCS1125-2-A                                                |
|-------------------------------------|---------------------------------------------------------------|
| PCS Data                            |                                                               |
| AC Rated Power                      | 1125kW ( 9 × 125kW )                                          |
| AC Rated Voltage / Frequency        | 400Vac / 50Hz ( 3L+N+PE )                                     |
| AC Rated Current                    | 1624A ( 9 × 180.4A )                                          |
| Power Factor                        | -1 ~ +1                                                       |
| Battery Input Voltage Range         | 630Vdc ~ 1000Vdc                                              |
| Max. Charging / Discharging Current | 1710A ( 9 × 190A )                                            |
| General Data                        |                                                               |
| Operating Temperature               | -30°C~ +55°C (Discharge derating>45°C; Charge derating >40°C) |
| Humidity                            | 0~95% (No condensation)                                       |
| Ingress Protection                  | IP54                                                          |
| Anticorrosion grade                 | C4-M (Optional C5)                                            |
| Altitude                            | ≤3000m                                                        |
| Weight                              | ≤2000kg                                                       |
| Dimensions ( W × D × H )            | 1850 X 1120 X 2450mm                                          |

| Model                                   | WS-TS1000-2-A                  |
|-----------------------------------------|--------------------------------|
| Grid Side Data                          |                                |
| Rated AC Input/Output Active Power (kw) | 1000                           |
| Rated AC Input/Output Current (A)       | 1450                           |
| Rated Input/Output Voltage (V)          | 220/380, 230/400 (three phase) |
| Grid Connection Form                    | 3L/N/PE                        |
| Rated input/Output Grid Frequency       | 50Hz/60Hz                      |
| Load Side Data                          |                                |
| Rated AC Input/Output Active Power (kw) | 1000                           |
| Rated AC Input/Output Current (A)       | 1450                           |
| Rated Input/Output Voltage (V)          | 220/380, 230/400 (three phase) |
| Grid Connection Form                    | 3L/N/PE                        |
| Rated input/Output Grid Frequency       | 50Hz/60Hz                      |
| GEN Side Data                           |                                |
| Rated AC Input/Output Active Power (kw) | 1000                           |
| Rated AC Input/Output Current (A)       | 1450                           |
| Rated Input/Output Voltage (V)          | 220/380, 230/400 (three phase) |
| Grid Connection Form                    | 3L/N/PE                        |
| Rated input/Output Grid Frequency       | 50Hz/60Hz                      |
| System Data                             |                                |
| Dimension (W x D x H,mm)                | 2000 × 1200 × 2450mm           |
| Weight Appr. (kg)                       | 1600                           |
| System Operating temperature range      | -20°C~55°C                     |
| Max. working altitude (m)               | ≤3000                          |
| IP Rating of Enclosure                  | IP54                           |
| Switching Time (ms)                     | ≤20                            |

Winter Series  
Utility-Scale ESS Solution

Liquid - Cooled ESS

MAGNUS 5000



WS-L5000-BC-2 (AS, AF, LATAM, EU)  
The Low LCOS Multi-intelligent Energy Storage Solution



Economical and Efficient

- 20-foot container 5016kWh
- Maximum efficiency 94.5%
- Shoulder-to-shoulder/back-to-back installation



Flexible and Convenient

- Liquid cooling circuit equipped with bidirectional shut-off valve
- Equipped with waste liquid collection device
- Single/dual circuit output, 2/4h application



Smart Cloud Management

- AI-Power Load Optimization
- 24/7 Remote Monitoring & O&M
- Real-Time Battery Health & Safety Alerts
- Cloud-Connected Ecosystem



Ultimate Safety

- 2+3 Level Fire Protection System
- 3+2+1 Level Electrical Safety Protection

WS-MV5000-2 (AS, AF, LATAM, EU)  
Integrated Boost and Conversion Solution



High-efficiency Conversion

- Three-level topology with a maximum efficiency of 99%
- Intelligent air-water cooling with a maximum operating temperature of 60°C



Safe and Reliable

- IP54/C5 high protection class
- Online insulation monitoring for safety assurance
- Interlocks with BMS and EMS to support multiple system protection functions



Grid Support

- Fast active/reactive power response, supporting source-grid-load-storage dispatching
- Weak grid support, enabling stable operation with SCR=1.1
- Equipped with grid-forming functions such as inertia support and microsecond-level voltage building



Flexible Application

- Supports off-grid parallel operation and independently participates in grid black start
- Equipped with VSG, VF, PQ and other operating modes
- Supports application in various scenarios including high altitude, high salt spray, high temperature and extreme low temperature

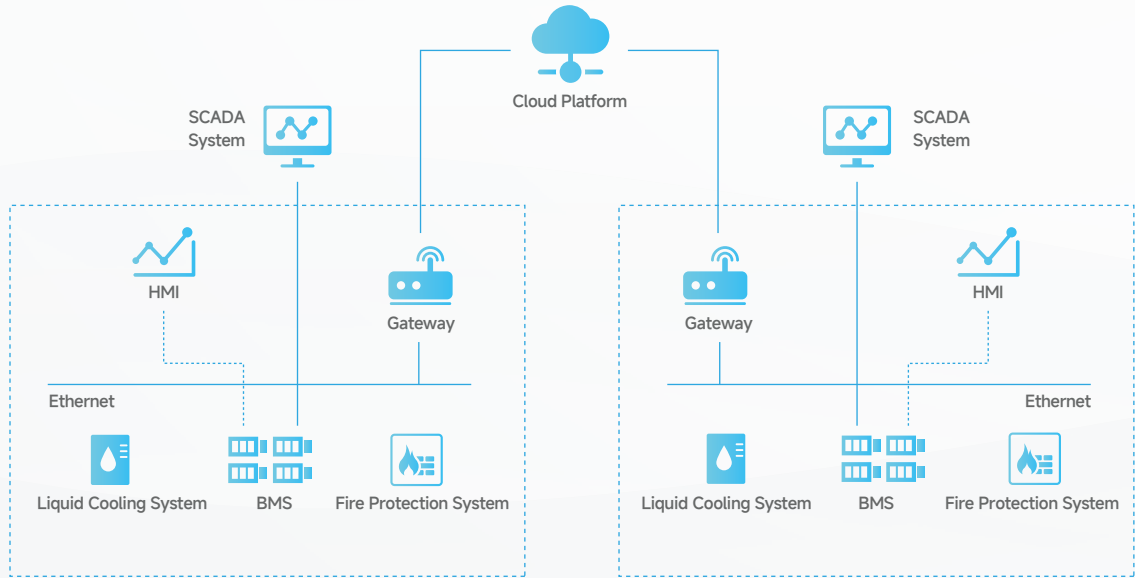
WS-L5000-BC-2 (AS, AF, LATAM, EU)

WS-MV5000-2 (AS, AF, LATAM, EU)

Technical Data

| Model                     | WS-L5000-BC-2                                                              |
|---------------------------|----------------------------------------------------------------------------|
| Battery Data              |                                                                            |
| Battery Type              | LiFePO <sub>4</sub>                                                        |
| Nominal Capacity ( Cell ) | 314Ah                                                                      |
| PACK Configuration        | 1P104S                                                                     |
| RACK Configuration        | 4*1P104S                                                                   |
| System Configuration      | 2*6P416S (12P416S)                                                         |
| Nominal Voltage           | 1331.2Vdc (1144~1497.6Vdc)                                                 |
| Nominal Energy            | 5016kWh (12× 418kWh)                                                       |
| Nominal Current           | 2*939A                                                                     |
| Charge/Discharge Rate     | 0.5P                                                                       |
| DC Efficiency             | ≥94.5%                                                                     |
| System Data               |                                                                            |
| Operating Temperature     | -30°C ~ +55°C (>45°C derating)                                             |
| Storage Temperature       | -30°C ~ +60°C                                                              |
| Humidity                  | 0 ~ 95%RH                                                                  |
| Type of Cooling BAT       | Liquid cooling                                                             |
| Fire Suppression          | Aerosol、Water                                                              |
| Ingress Protection        | IP55                                                                       |
| Anticorrosion Grade       | C4/C5                                                                      |
| Altitude                  | ≤3000m                                                                     |
| Weight                    | ≤40500kg                                                                   |
| Dimensions ( W × D × H )  | 6058*2438*2896mm                                                           |
| Communication             | Ethernet/CAN                                                               |
| Standard Compliance       | IEC62619,IEC62477,IEC62933,IEC63056,IEC61000,UN38.3,UN3536,NFPA855,UL9540A |

Architecture Diagram



| Model                              | WS-MV5000-2                                                                                                              |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| DC Side Data                       |                                                                                                                          |
| Max. DC Voltage                    | 1500Vdc                                                                                                                  |
| DC Voltage Range for Nominal Power | 1000Vdc~1500Vdc                                                                                                          |
| Max. DC Current                    | 1913A*4                                                                                                                  |
| No. of DC Inputs                   | 4                                                                                                                        |
| PCS AC Side Data                   |                                                                                                                          |
| Rated output power                 | 1250*4 kVA                                                                                                               |
| Max output power                   | 1250*3*4 kVA @35°C                                                                                                       |
| Rated AC voltage                   | 690Vac                                                                                                                   |
| AC voltage range                   | 586.5~759Vac (-15%~+10%)                                                                                                 |
| Max AC current                     | 3138*4 A                                                                                                                 |
| Nominal grid frequency             | 50Hz                                                                                                                     |
| Grid frequency rage                | 45~55Hz                                                                                                                  |
| Power factor range                 | 1 leading ~ 1 lagging                                                                                                    |
| Efficiency                         |                                                                                                                          |
| Average Efficiency                 | ≥98.3%                                                                                                                   |
| Transformer                        |                                                                                                                          |
| Isolation Mode                     | Oil-Immersed Transformer                                                                                                 |
| Transformer Rated Power            | 5250kVA                                                                                                                  |
| LV/MV Voltage                      | 0.69kV/20~35kV                                                                                                           |
| Transformer Vector                 | Dy11                                                                                                                     |
| Cooling Type                       | ONAN                                                                                                                     |
| General Data                       |                                                                                                                          |
| Dimensions (W*D*H)                 | 12192×2438×2896mm                                                                                                        |
| Weight                             | ≤40T                                                                                                                     |
| Protection Degree                  | IP65 for PCS, IP54 others                                                                                                |
| Cooling Method                     | Natural air cooling (transformer)/Air-water cooling (PCS)                                                                |
| Altitude                           | 3000m( > 2000m derating)                                                                                                 |
| Operating Temperature Range        | -40°C~60°C (>45°C derating)                                                                                              |
| Humidity Range                     | 0~100% (non-condensing)                                                                                                  |
| Anticorrosion Grade                | C4/C5                                                                                                                    |
| Over Voltage Range                 | DC OVC II / AC OVC III                                                                                                   |
| Surge Protection                   | DC Type II / AC Type II                                                                                                  |
| Communication                      | RS485/ETH/CAN                                                                                                            |
| Standard Compliance                | IEC 62477, IEC 61000, IEC 62920, IEC 61727, IEC 62116,IEC 60076, IEC 62271-100/103/200, EN 50549-2/-10,ANSI C57.12.10/20 |

\* The warranty will be based on the warranty period or the minimum throughput of each model, whichever comes first.