POWERING YOUR LIFE

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Cixi, Ningbo, Zhejiang, P.R.China

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

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DEYE ENERGY STORAGE PRODUCT CATALOG (GLOBAL)

Deye

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^2	10000 +	2021
Total Area	Employees	Listed on SSE

4 CORE INDUSTRY CHAINS

- High-Efficiency Inverter Solution
- All-Scenario Humidity Solution
- Solar HVAC Solution
- Smart Energy Storage Solution

DEVELOPMENT HISTORY

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.

2023
Intelligent Energy
Deye established Deye Cloud and energy storage R&D center in Shanghai.

2021
Listed on SSE
In April, Deye listed on the main board of the Shanghai Stock Exchange.

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.

2016
Photovoltaic Inverter
Deye's residential and C&I inverters have been rapidly evolving to provide customized solutions.

2007
Heat-exchange Field
Expanded into heat-exchange technologies and became a key supplier to Midea.

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

Energy Storage Factory

Energy Storage Factory

Energy Storage Factory

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+	**180,000+**	**600,000+**	**300+**
Capacity 2025	Sqm	Packs Capacity	R&D Engineers

GLOBAL CERTIFICATIONS

Ensure compliance with regional standards

GLOBAL LAYOUT

GLOBAL HEADQUA-RTERS Ningbo, China

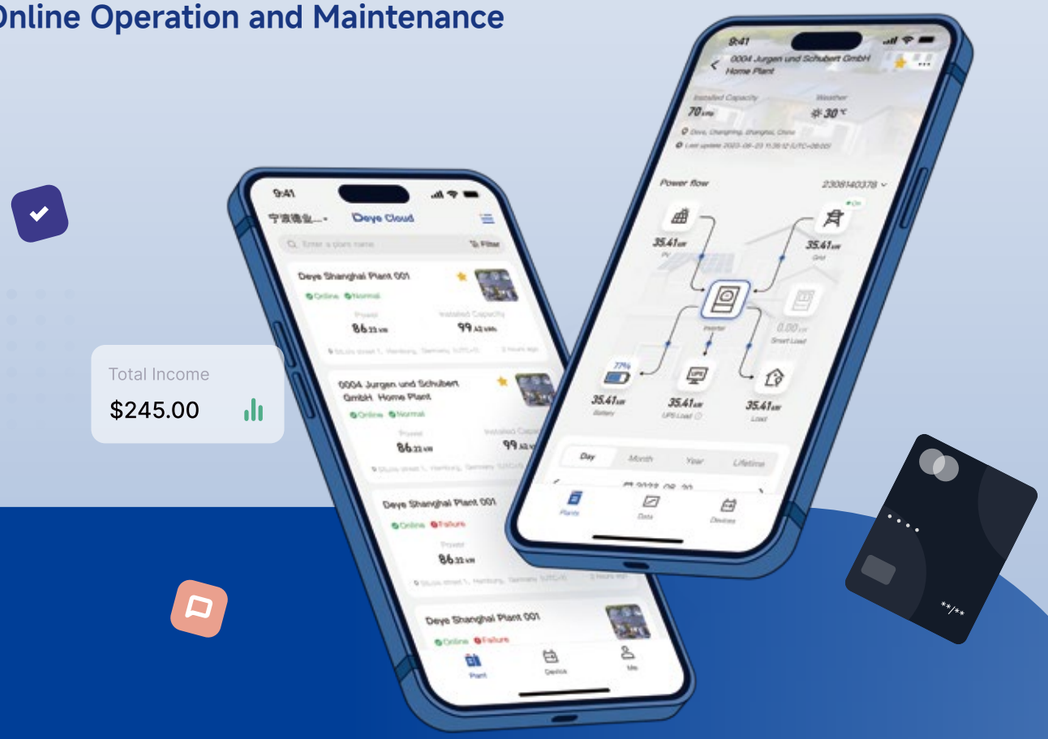
23 Overseas Service Centers

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.

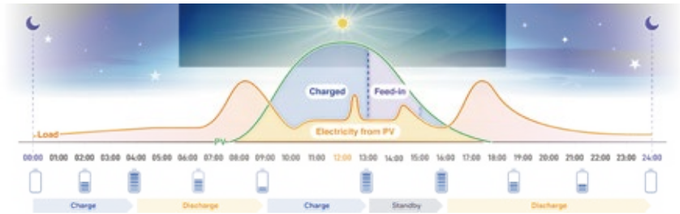
Deye Cloud utilizes two localized data centers in Europe and America to ensure data independence and security.

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).

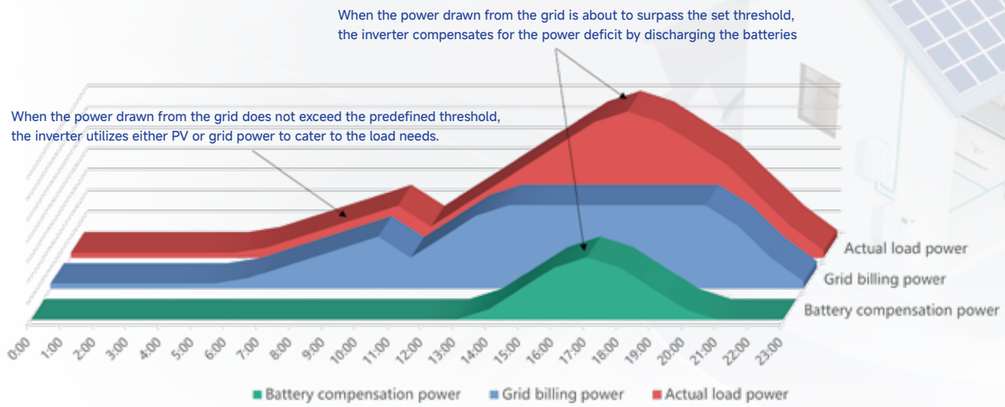
- **Self Consumption - conservative**



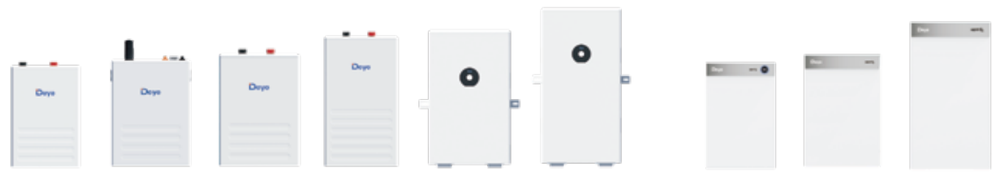
- **Maximum Earning - radical**

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



SE-F5
SE-F5 Plus

SE-F5 Pro

SE-F12

SE-F16

SE-F12 Max

SE-F16 Max

SE-F5 Lite/
F5-A /F5 Plus-A

SE-F12 Lite
SE-F12-A

SE-F16-A

RW-F5.3-1H3

SE-G5.1 Pro-B

RW-F10.2

RW-F10.2-B

AI-W5.1-B

AI-W5.1-B-ESS

AI-W16

Summer Series

GB-L Lite/
Plus/Ultra

GB-L Pro

GB-SL Pro

GB-A

GB-W

BOS-B Pro-A3

BOS-A

BOS-GH/GL

BOS-G Pro

GE-F60 & GE-F120-2H2/4/6

GE-F128 & GE-F240 & GE-F256

Autumn Series

SUN-BK80/160/200/250
-2.56KWH-EU-AM4-18/32L

WD-G12200 & WD-G12100
& WD-G24100

Winter Series

C&I PV-BESS Solution
MC-L Series

C&I PV-BESS-EV Charging Integrated Solution
MC-LC Series

WS-G(S)2000-2H3
& WS-G(S)2000-4H3

WS-L4300-BC-3-A
& WS-PCS1125-2-A & WS-TS1000-2-A

WS-L5000-BC-2 & WS-MV5000-2

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SPRING Series

Residential ESS Solution

SE-F5 & SE-F5 Plus（AS, AF, LATAM） 17

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SE-F12 Max (EU, AU) & SE-F16 Max (AU) 19

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SE-G5.1 Pro-B（EU, NA, AU） 29

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AI-W5.1-B-ESS（EU, AU） 35

All-in-One Home ESS（EU, AU） 39

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℃ to 55 ℃, natural cooling

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

Technical Data

Main Parameters

		SE-F5	SE-F5 Plus	SE-F5 Pro
Battery Chemistry			$LiFePO_4$	
Capacity			100 Ah	
Scalability[1]			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[2]	Recommend	50 A		50 A
	Max. Continuous	100 A		100 A
	Peak	120 A (10 sec)		150 A (120 sec)
Discharge Current[2]	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) (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 [3]	5 years	5 Years / 10 Years [4]	
Energy Throughput [3]	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		$LiFePO_4$			
Capacity		235 Ah		314 Ah	
Scalability[1]		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[2]	Recommend	115 A		157 A	
	Max. Continuous	230 A		160 A	
	Peak	280 A (10 sec)			
Discharge Current[2]	Recommend	115 A		157 A	
	Max. Continuous	230 A			
	Peak	280 A (10 sec)			

Other Parameters

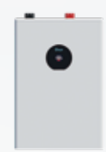
Model	SE-F12	SE-F12 Max	SE-F16	SE-F16 Max
Recommend Depth of Discharge	90% DoD	95% DoD	90% DoD	100% DoD
Dimension (W × D × H, mm) (Without hanging board)	400 × 559 × 233	464 × 767 × 244.5	400 × 708 × 233	464 x 914 × 244.5
Weight Approximate	84 kg	93 kg	109 kg	118 kg
LED Indicator	LED (SOC, working, protecting) & 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 [3]	5 Years / 10 Years [4]	10 years	5 Years / 10 Years [4]	10 years
Energy Throughput [3]	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

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	

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 chargre & discharge(SE-F5-A&SE-F5 Plus-A), GAN MOSFETs: 50% loss reduction, high-temp resistance

Flexible Expansion

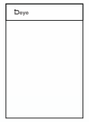
- Max. 32 units in parallel

Reliable Durability

- Operates reliably in -20℃ to 55℃, 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			$LiFePO_4$	
Capacity			100 Ah	
Scalability[1]			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[2]	Recommend	33 A	50 A	
	Max. Continuous	50 A	100 A	
	Peak	60 A (10sec)	120 A (10 sec)	
Discharge Current[2]	Recommend	33 A	50 A	
	Max. Continuous	60 A	100 A	
	Peak	72 A (10 sec)	120 A (10 sec)	

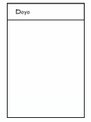
Other Parameters

Model	SE-F5 Lite	SE-F5-A	SE-F5 Plus-A
Recommend Depth of Discharge	80% DoD		100% DoD
Dimension (W × D × H, mm) (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 [3]	5 years		5 Years / 10 Years [4]
Energy Throughput [3]	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			$LiFePO_4$	
Capacity		235 Ah	235 Ah	314 Ah
Scalability[1]			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[2]	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[2]	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

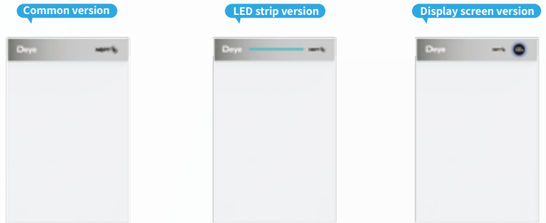
Model	SE-F12 Lite	SE-F12-A	SE-F16-A
Recommend Depth of Discharge	95% DoD		100% DoD
Dimension (W × D × H, mm) (Without hanging board)	400 x 594 x 233		400 x 737 x 233
Weight Approximate	84 kg		109 kg
LED Indicator	LED (SOC, working, protecting) & Buzzer		
IP Rating of Enclosure	IP21		
Operating Temperature	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 [3]	5 Years / 10 Years [4]		
Energy Throughput [3]	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

SE-F Series Model Selection and Appearance Reference



Mounting example

Stacked

Supports 6 layers in parallel (4 layers for SE-F16-A), allows multiple clusters in parallel

SE-F5 Lite & SE-F5-A & SE-F5 Plus-A

SE-F12 Lite & SE-F12-A

SE-F16-A

Wall mounted

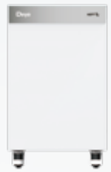
All support wall mounted installation, and support for multiple packs in parallel

SE-F5 Lite & SE-F5-A & SE-F5 Plus-A

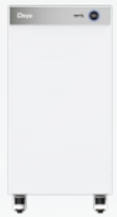
SE-F12 Lite & SE-F12-A

SE-F16-A

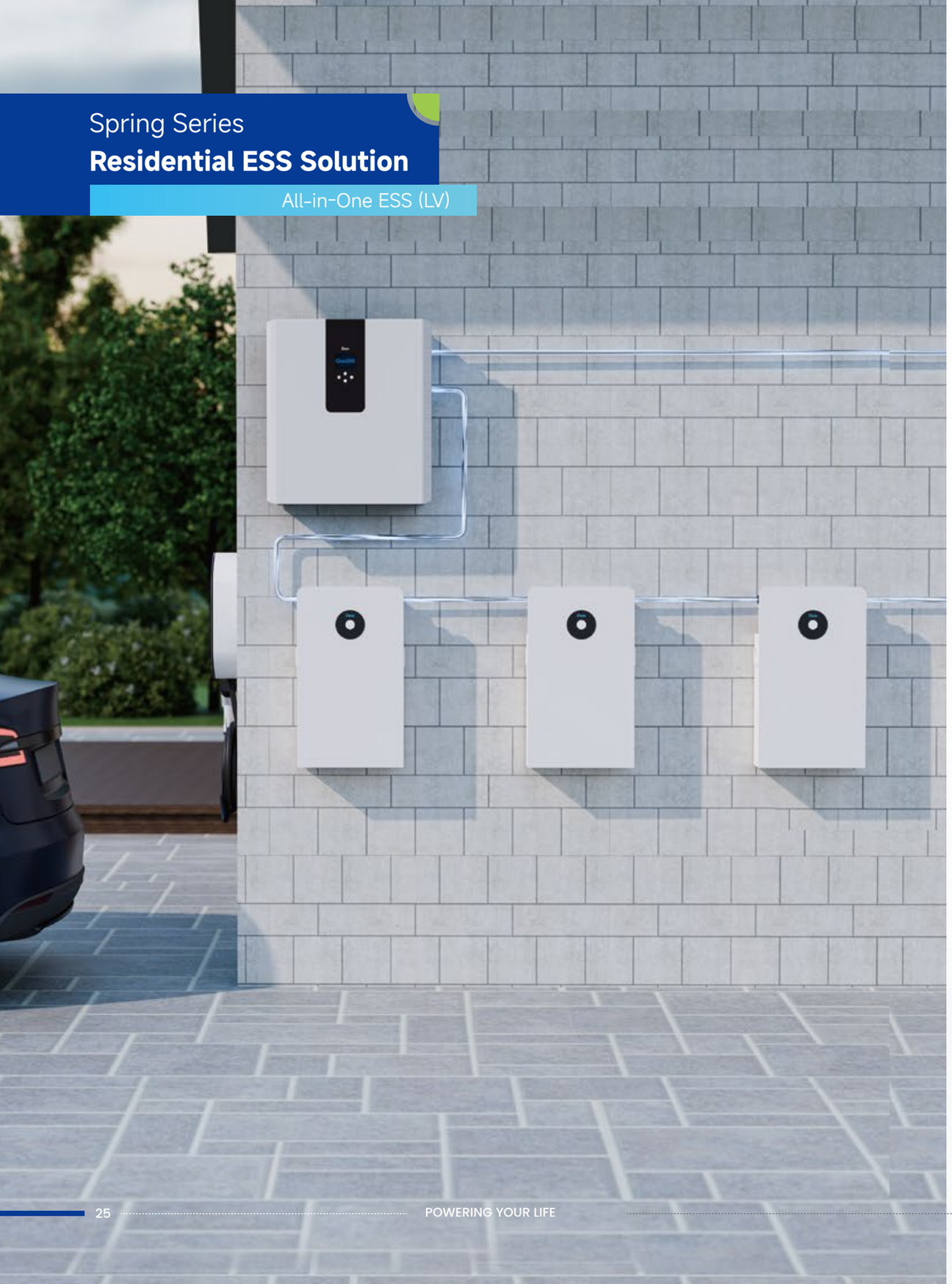
Optional wheels available for SE-F12 Lite & SE-F12-A & SE-F16-A



SE-F12 Lite & SE-F12-A



SE-F16-A



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℃ ~ 55℃ (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

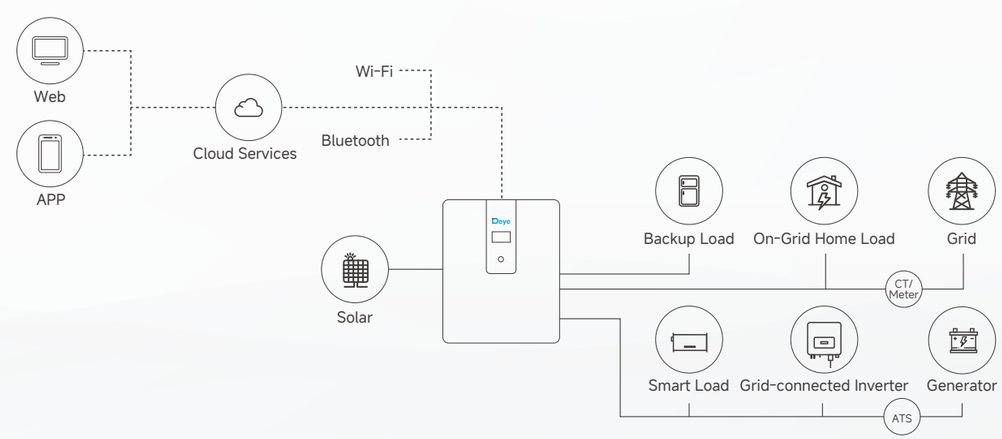
All-in-One Design

- Integrated 5kW hybrid inverter and 5.3kWh LFP battery

Intelligent Control

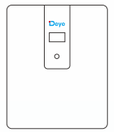
- Comfortable and easy control via App, PC or Touch-Display

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

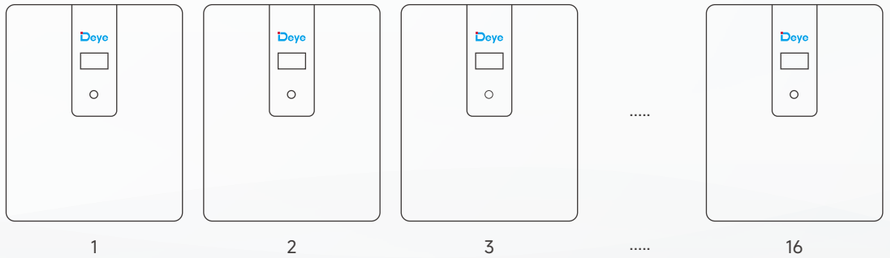
Max. PV Access Power (W)	10000
Max. PV Input Power (W)	8000
Max. PV Input Voltage (Vdc)	500
Start Up PV Voltage (Vdc)	125
MPPT Voltage Range (Vdc)	150 ~ 425
Full Load MPPT Voltage Range (Vdc)	300 ~ 425
Rated PV Input Voltage (Vdc)	370
Max. Operating PV Input Current (A)	18+18
Max. PV Input Short-circuit 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. 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℃ to 55℃

Safer

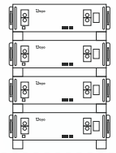
- Cobalt Free Lithium Iron Phosphate LFP Battery : safety and long lifespan, high efficiency and high power
- Intelligent BMS, providing complete protection

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		$LiFePO_4$
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) [1]		5.12
Charge / Discharge Current (A) [2]	Recommend	50
	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, Rack-Mounted (19-inch standard cabinet, cabinet depth ≥600mm)
Communication Port	CAN2.0, RS485
Warranty Period	5 Years / 10 Years [4]
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

Enhanced Reliability

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

Smarter

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

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

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		$LiFePO_4$	
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 (Max. 326kwh)	Max. 32 pcs pack in paralle (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 Current (A) [2]	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 (Without hanging board)	600×830×200 (Without hanging board)
Weight Approximate (kg)	104	235.9 lbs.(107kg)
Master LED indicator	SOC state(20%~100%) work state(alarming, protecting)	LED(SOC:20%~100% and working state)
IP Rating of Enclosure	IP65	NEMA 3R(IP65)
Operating Temperature (°C)	Charge:1~55°C Discharge:-20°C~55°C	Charge: 33 °F ~ 131 °F (1 ~ 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 (-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)

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

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		$LiFePO_4$					
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) [1]		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 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) , 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 [3]	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.

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

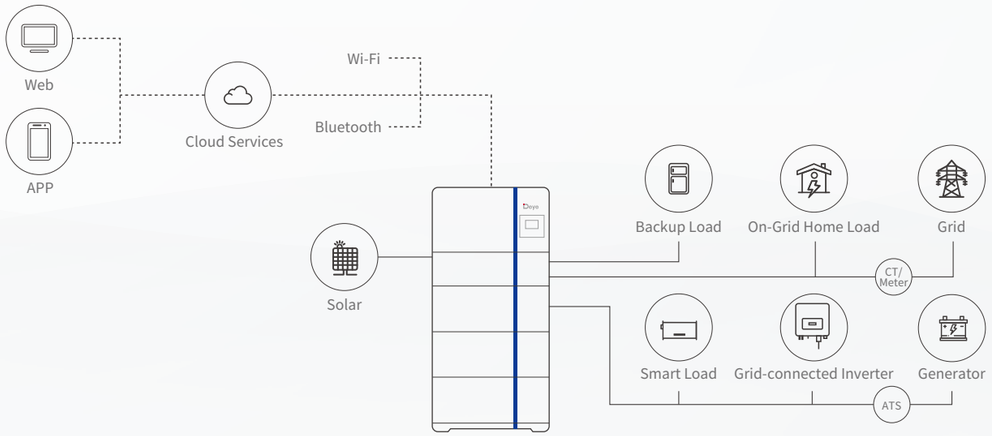
Uninterrupted Supply

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

Smart Control

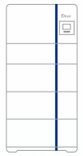
- Convenient management via App, PC, or touch display

⩾6000	IP65	70%	10 years
Cycles	Rated for indoor and outdoor use	EOL	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°C, >45°C 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

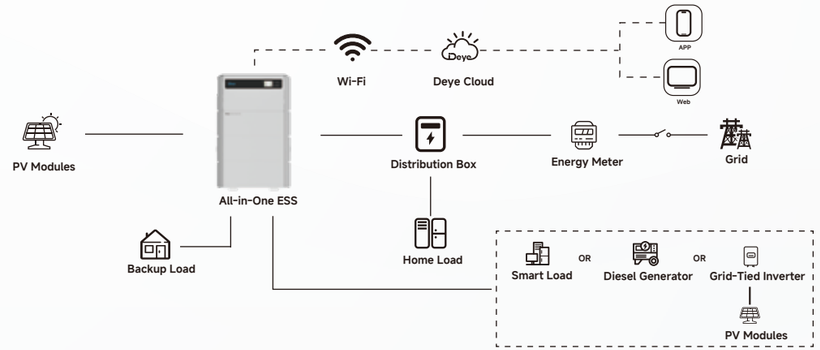
Offline Wireless Zero-Export Solution
LoRa-based wireless energy management with CT monitoring, no internet required.

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)

3.6-20kW power options	Rapid installation	200% 2x peak power output (10s)	97.6 % Max. efficiency
200% PV oversizing	Scalable up to 96kWh	Max. 70A bypass current	8000+ life cycles
Max. 380A charge/ discharge current	4ms Seamless on/ off-grid switching	IP66 Support short-term immersion in 0.5m of water	1-55°C 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	$LiFePO_4$					
Max. Output Power	Single-Phase: 3.6/4/4.6/5/6/7.5/8/10/12kW, 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					

Highly Integrated Solution

Main Parameter

Model		AI-W16	AI-W16-H
Battery Chemistry		$LiFePO_4$	
Built-in Circuit Breaker		250A, 80Vdc	
Rated Capacity (Ah) [1]		314	
Nominal Voltage (V)		51.2	
Operating Voltage(V)		41.6-58.4	
Nominal Energy (kWh)		16	
Charge Current (A) [2]	Max.Continuous	160	
	Peak	192	
Discharge Current (A) [2]	Max.Continuous	220	
	Peak	264	
Depth of Discharge [3]		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 [1]		≥8000 (70%EOL)	
Max. Energy RTE (DC) [1]		95%	
Installation		Floor-Mounted, Stack-Mounted	
Communication		CAN2.0	
Certification		UN38.3, CE, CB, UL9540A	
Energy Throughput [4]		50 MWh	
Warranty Period [4]		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

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 (Recommdend)

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

Model		GB-L17 Lite	GB-L23 Lite	GB-L28 Lite	GB-L34 Lite	GB-L40 Lite	GB-L46 Lite
Main Parameters							
Cell Chemistry		$LiFePO_4$					
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)[1]	Max.Continuous	75					
	Peak	104(15s)					
Disharge Current (A)[1]	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[2]		≥6000					
Working Temperature	Charge	0~55					
(°C)	Discharge	-20 ~ 55					
Warranty[3]		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		$LiFePO_4$					
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)[1]	Max.Continuous	75					
	Peak	104(15s)					
Disharge Current (A)[1]	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[2]		≥6000					
Working Temperature	Charge	0~55					
(°C)	Discharge	-20 ~ 55					
Warranty[3]		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		$LiFePO_4$					
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)[1]	Max.Continuous	75					
	Peak	104(15s)					
Disharge Current (A)[1]	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[2]		≥6000					
Working Temperature	Charge	0~55					
(°C)	Discharge	-20 ~ 55					
Warranty[3]		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		$LiFePO_4$					
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)[1]	Max.Continuous	75					
	Peak	104(15s)					
Disharge Current (A)[1]	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[2]		≥6000					
Working Temperature	Charge	0~55					
(°C)	Discharge	-20 ~ 55					
Warranty[3]		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		$LiFePO_4$					
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)[1]	Max.Continuous	75					
	Peak	104(15s)					
Disharge Current (A)[1]	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[2]		≥6000					
Working Temperature	Charge	-20~55 (Heating On)					
(°C)	Discharge	-20 ~ 55					
Warranty[3]		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		$LiFePO_4$					
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)[1]	Max.Continuous	75					
	Peak	104(15s)					
Disharge Current (A)[1]	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[2]		≥6000					
Working Temperature	Charge	-20~55 (Heating On)					
(°C)	Discharge	-20 ~ 55					
Warranty[3]		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℃.

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

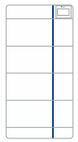
- Intelligent temperature sensing across core components ensures stable, reliable performance.

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



Main Parameters

Model	GB-L8-Pro	GB-L12-Pro	GB-L16-Pro	GB-L20-Pro	GB-L24-Pro
Cell chemistry	$LiFePO_4$				
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 Current (A) [2] — Recommend	20				
Charge / Discharge Current (A) [2] — Max.	40				
Charge / Discharge Current (A) [2] — 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 × 650	540 × 385 × 870	540 × 385 × 1090	540 × 385 × 1310	540 × 385 × 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

Smarter

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

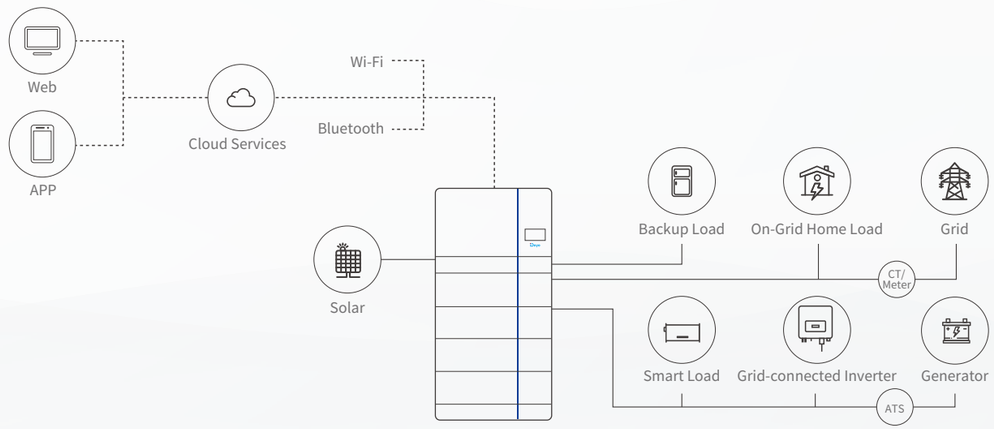
Enhanced Reliability

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

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		$LiFePO_4$				
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 Current (A) [2]	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 × 1100	540 × 385 × 1320	540 × 385 × 1540	540 × 385 × 1760	540 × 385 × 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	19500	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	420~850	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	15000	20000
Max. Ac Output Power (W)	5500	6600	8800	11000	13200	16500	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	22.8 / 21.8	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	25 / 24	33.4 / 31.9
Max. Three-phase Unbalanced output Current (A)	13	13	18	22	25	30	35
Max. Continuous AC Pass Through (A)	40				80		
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	22.8 / 80 / 22.8	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.

Single-Function and Full Load Support

- Can handle both single appliances and full household loads.

Backflow Prevention

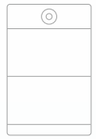
- Equipped with backflow prevention measures to protect the grid.

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			$LiFePO_4$	
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 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

Flexible Expansion

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

Intelligent Thermal Management

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

High Power Output

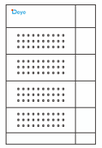
- 230A continuous charge/discharge for high-load and fast-charge scenarios

Robust Protection

- C4 anti-corrosion coating ensures superior environmental resistance

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

Technical Data



Main Parameters

Cell Chemistry	$LiFePO_4$											
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 ~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)	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 Current — Max.Continuous	230											
Charge / Discharge Current — Peak	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

Multi-Fusion

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

Reliable

- Operating temp : -20°C to 55°C
- Operate up to 3000m altitude
- 1.1x overload capacity
- Balancing solutions extend battery life
- Triple auxiliary power design for stable supply

Easy Maintenance

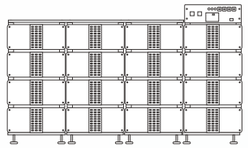
- 5U Standard Chassis
- User Interface & Bluetooth App
- USB & Cloud Upgrades
- TCP Protocol for EMS
- Fault Signal Input Support

Safer

- LFP batteries
- Support aerosol fire extinguishing

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

Technical Data



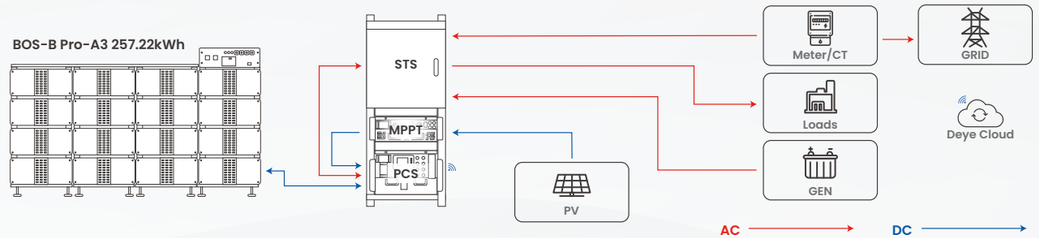
Main Parameters

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												
Matching Mode – PCS + MPPT	16 units (on/off-grid) for MPPT Open-Circuit Voltage ≤800V 15 units (on/off-grid) for MPPT Open-Circuit Voltage ≤ 750V 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

Flexible Expansion

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

Smart Operation

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

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

Easy Installation

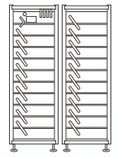
- 3U rack embedded design
- A concise data display interface
- Multiple battery modules can be in parallel for expanding
- Dual power output plugins, each supports 100A
- Connectable to two inverter DC interfaces
- USB, Bluetooth connection

Long Service Life

- 10-year warranty
- 6000 cycles

BOS-A（NA, AS, AF, LATAM, EU）

Technical Data



Main Parameters

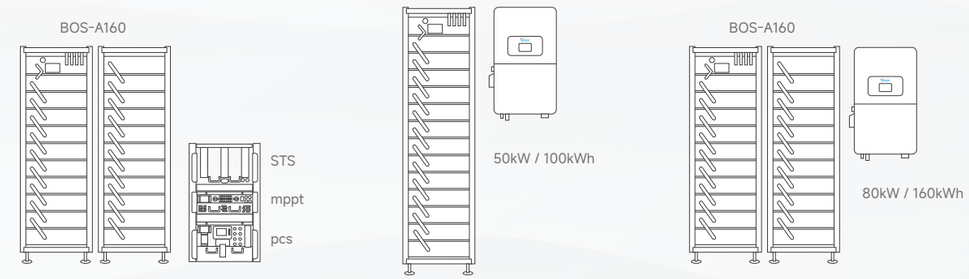
Cell Chemistry			$LiFePO_4$	
Module Energy (kWh)			7.68	
Module Nominal Voltage (V)			38.4	
Module Capacity (Ah)			200	
Module Dimension (W × D × H, mm)			601.5 × 520 × 135	
Module Weight Approximate (kg)			70	
Battery Module Qty In Series (Optional)		7	13	21
System Nominal Voltage (V)		268.8	499.2	806.4
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) [1]		48.38	89.85	145.15
Charge / Discharge	Recommend		100	
Current (A) [2]	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		

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.

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			$LiFePO_4$	
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[2] Current (A)	Recommend	100	50	
	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

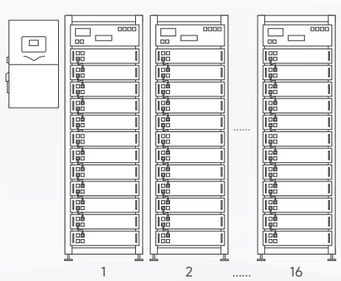
	1 hour		2 hours	
Hybrid inverter power	30kW	60kW	60kW	30kW
Battery model	BOS-GH40	BOS-GH60	BOS-GH60	BOS-GL60
Number of batteries	1 pc	1 pc	2 pcs	1 pcs

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

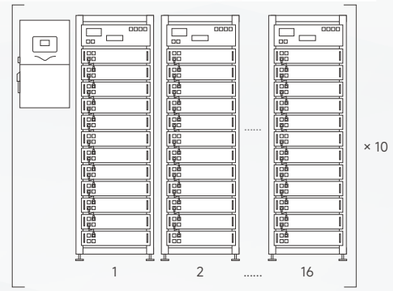
Battery Module Number	BOS-G20	BOS-G25	BOS-G30	BOS-G35	BOS-G40	BOS-G45	BOS-G50	BOS-G55	BOS-G60
Battery Module Qty In Series (Optional)	4	5	6	7	8	9	10	11	12
System Energy (kWh)	20.48	25.6	30.72	35.84	40.96	46.08	51.2	56.32	61.44

Supports up to 16 battery clusters in parallel

Supports up to 10 AC inverters in parallel



60kW Inverter+Battery (BOS-GH60) × 16
60kW/960kWh



[60kW Inverter+Battery (BOS-GH60) × 16] × 10
600kW/9600kWh

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

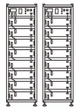
- Multiple battery modules can be in parallel for expanding capacity and power. Support USB upgrade, remote up grade (Compatible with Deye inverter).

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	$LiFePO_4$			
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 Current (A)	Recommend	50		
	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

Total Protection

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

Integrated Technology

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

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		$LiFePO_4$
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) [1]		55.29
Rated DC Power		61.44
Charge / Discharge[2] 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

Enhanced Reliability

- Maximum battery temperature ≤ 35℃ at rated power
- IP55-rated for outdoor use
- Wide temperature range: -20℃ ~ 55℃

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

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 (°C)	0 ~ 35		
Operating Temperature (°C)	-20 ~ 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%In		
Display	LCD		
Operating Temperature Range (°C)	-40 ~ 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	≥6000 (@25°C±2°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

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

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

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			$LiFePO_4$	
Module Capcity (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)[1]		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)[2]	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)[3]	-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 -BC-2-A3	GE-F192 -BC-2-A3	GE-F208 -BC-2-A3	GE-F224 -BC-2-A3	GE-F240 -BC-2-A3
Cell Type		$LiFePO_4$				
Module Capcity (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)[1]		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 Current(A)[2]	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)[3]	-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		$LiFePO_4$
Module Capcity (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)[1]		257.23
System Nominal Voltage (Vdc)		819.2
System Operating Voltage (Vdc)		640~934.4
Rated DC Power (kW)		129
Charge/Discharge Current(A)[2]	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)[3]	-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)	1303x1240×2510
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.

CONTENTS

AUTUMN Series

Micro ESS Solution

SUN-BK80/160/200/250-2.56KWH-EU-AM4-18/32L (EU, AS, AF, LATAM) ····· 81

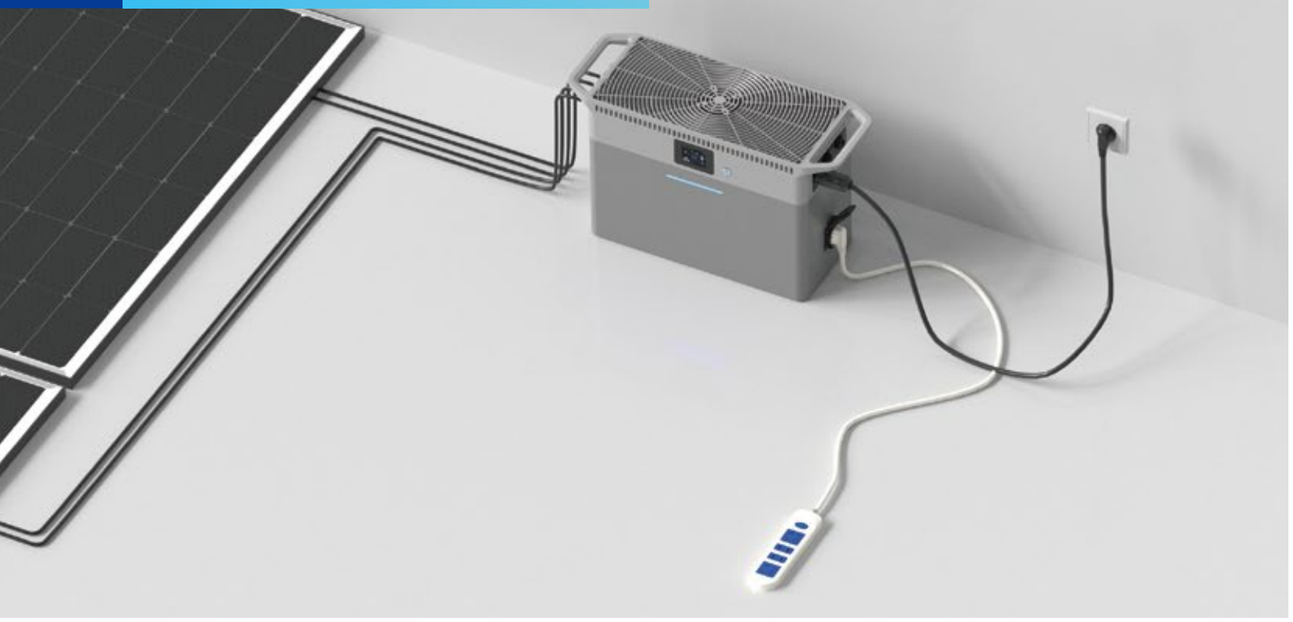
Residential ESS Solution

WD-G12100 & WD-G12200 & WD-G24100 (AS, AF, LATAM) ····· 85

Autumn Series

Micro ESS Solution

Micro ESS



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

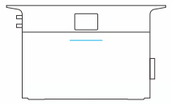
Enhanced Reliability

- 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)

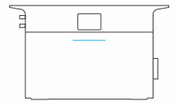


Technical Data

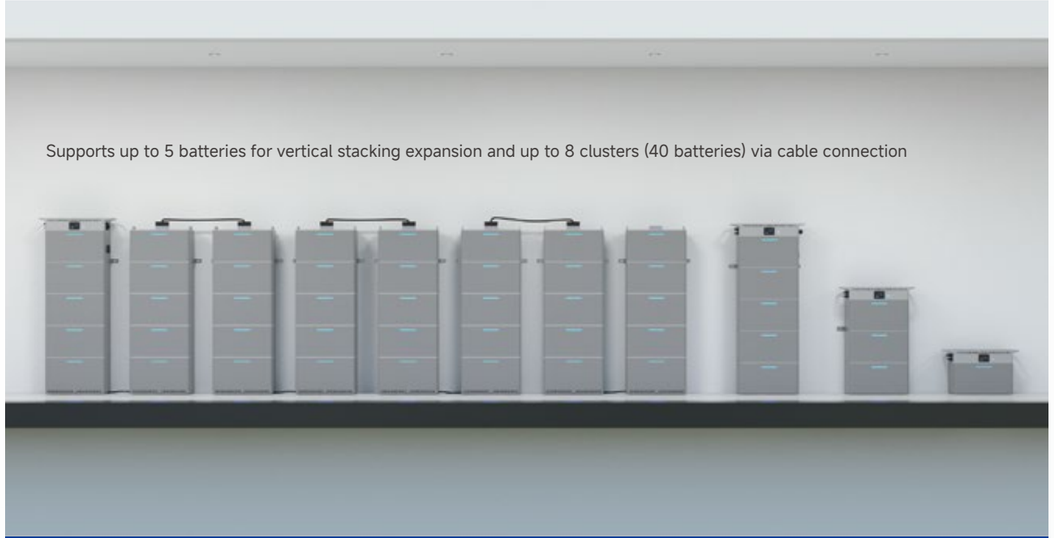
Model	SUN-BK80-2.56KWH -EU-AM4-18L	SUN-BK160-2.56KWH -EU-AM4-18L	SUN-BK200-2.56KWH -EU-AM4-18L	SUN-BK250-2.56KWH -EU-AM4-18L
Battery Input Data				
Battery Type	$LiFePO_4$			
Battery Voltage Range(V)	44.8-57.6 V			
Battery Nominal Energy (Wh)	2560Wh			
Max.Charging/Discharging Current(A)	50A			
Charging 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			

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

Technical Data



Model	SUN-BK80-2.56KWH -EU-AM4-32L	SUN-BK160-2.56KWH -EU-AM4-32L	SUN-BK200-2.56KWH -EU-AM4-32L	SUN-BK250-2.56KWH -EU-AM4-32L
Battery Input Data				
Battery Type	$LiFePO_4$			
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			



Model	AE-F2.56
Battery Technical Specification	
Battery Chemistry	$LiFePO_4$
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

Current-limiting Charging

- Supports parallel connection and auto-recharges after deep discharge

Automatic Recovery Function

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

Thermal Protection

- Prevents thermal runaway with high-precision temperature sensor

Flexible Expansion

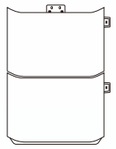
- Max.4 packs in series and Max. 10 units in parallel

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			$LiFePO_4$	
Nominal Capacity[1]		100 Ah	200 Ah	100 Ah
Nominal Voltage		12.8 V		25.6 V
Operating Voltage		11.2 V ~ 14.6 V		22.4 ~ 29.2 V
Nominal Energy[1]		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		Max. 2 units in series (51.2V)
Charge Current[2]	Max. Continuous	100 A	200 A	100 A
	Peak	200 A (10 sec)	300 A (10 sec)	200 A (10 sec)
Discharge Current[2]	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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WINTER Series

C&I ESS Solution

MC-L522-2H2/3（EU, AS, AF, LATAM） 89

C&I PV-BESS-EV Charging Integrated Solution

MC-LC480-2H2 & MC-LC480-BC-2（EU, AS, AF, LATAM） 93
MS-DC480-2 & MS-DCC180-2 & MS-MPPT-400/200-2 95

Utility-Scale ESS Solution

WS-G(S)2000-2H3 & WS-G(S)2000-4H3（AS, AF, LATAM, EU） 97
WS-L4300-BC-3-A (AS, AF, LATAM, EU) 101
WS-PCS1125-2-A & WS-TS1000-2-A（AS, AF, LATAM, EU） 103
WS-L5000-BC-2 & WS-MV5000-2（AS, AF, LATAM, EU） 105

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

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

Ultimate Safety

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

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	$LiFePO_4$
Nominal Capacity	2314Ah
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	$LiFePO_4$
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 Advanced features : load forecasting, production planning, electricity price planning, optimal economic curv
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)
MiniPCIe 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^2 DC power cord : Recommended wire diameter of 1.5mm^2 Eight core Ethernet cable: Recommended CAT5e Ethernet cable RS485 : Recommended 0.75mm^2~1.5mm^2 outdoor UV protection with shielding layer twisted pair cable length<1000m (baud rate 9600)

Intelligent Cloud Platform

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

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

Ultimate Safety

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

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	$LiFePO_4$
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	$LiFePO_4$
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
Altitude	≤ 2000 m (No derating required foroperation >1000m:Set the actual altitude value; 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

Applications

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

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

Performance

- 1.1x overload, 1.5x overload
- System Operating Conditions : -20℃ ~ 55℃ | 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

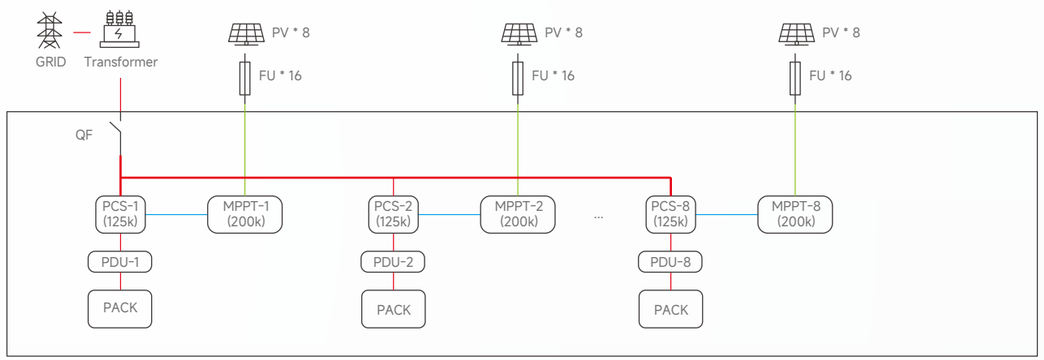
Model	WS-GS2000-2H3	WS-G2000-2H3
AC Parameter		
Rated power	1000kW	
Max. Apparent Power	1100kVA	
AC Rated Current	1443A(8×180.4A)	
Rated Voltage/Range	400V/0.85Un-1.1Un	
Grid Connection Form	3L+N+PE	
Frequency/Range	50Hz/45Hz-55Hz	
Power Factor Adjustment Range	-1 ~ +1	
Total Current Harmonic Distortion (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）

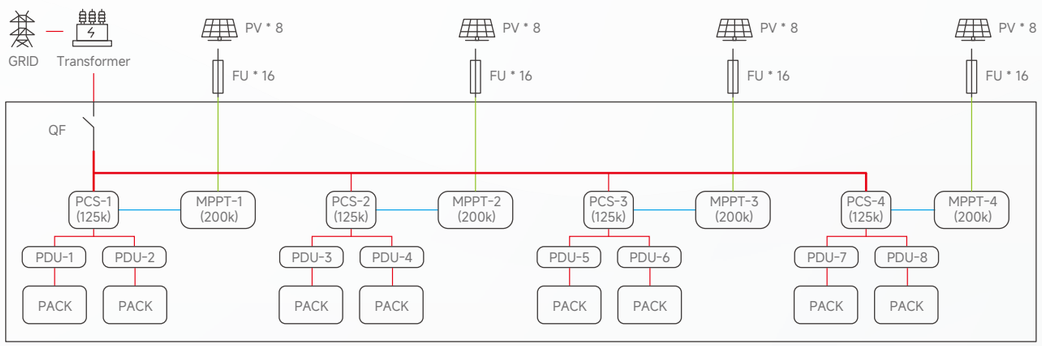
Technical Data

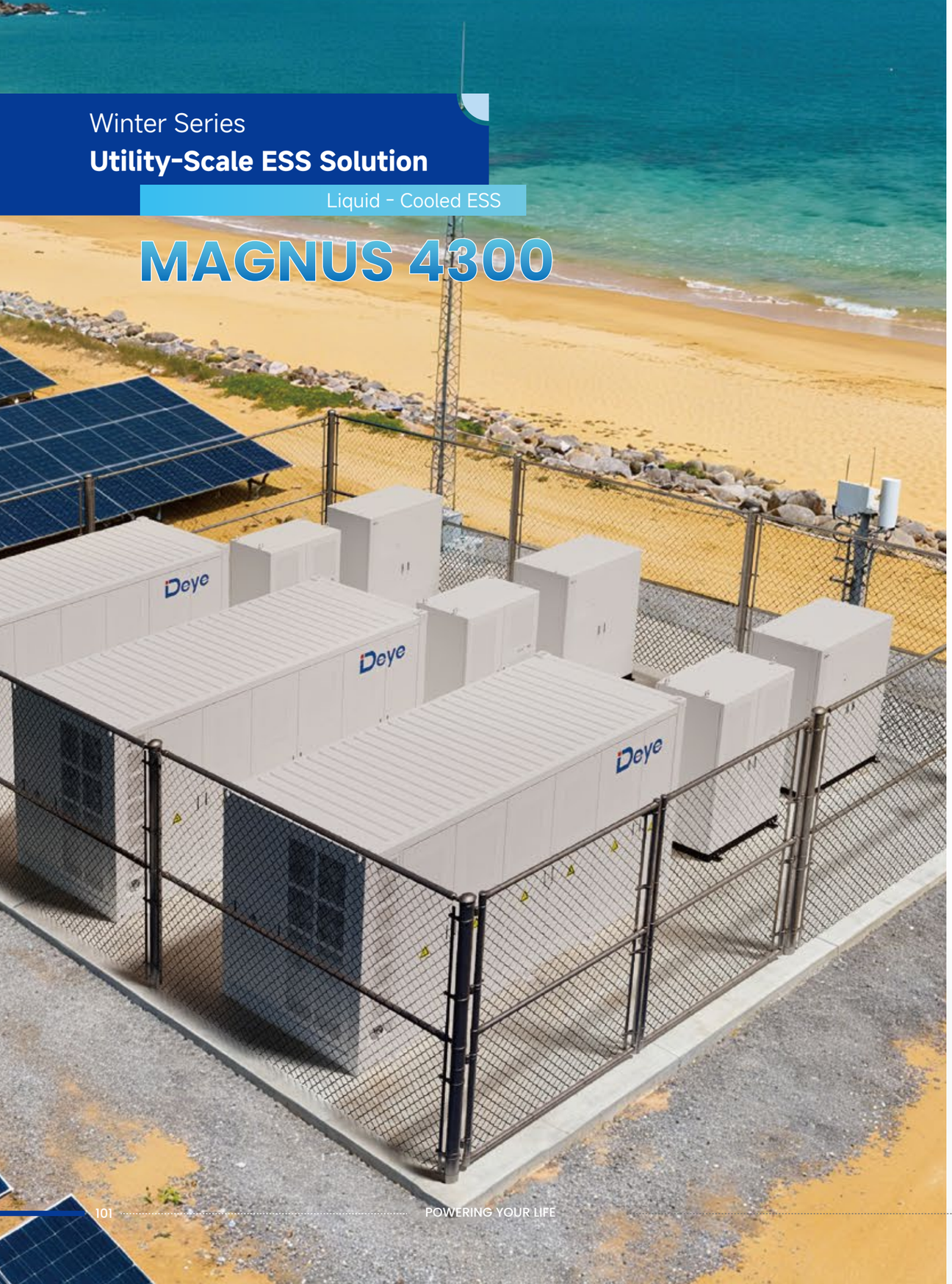
Model	WS-GS2000-4H3	WS-G2000-4H3
AC Parameter		
Rated power	500kW	
Max. Apparent Power	550kVA	
AC Rated Current	722A(8×180.4A)	
Rated Voltage/Range	400V/0.85Un-1.1Un	
Grid Connection Form	3L+N+PE	
Frequency/Range	50Hz/45Hz~55Hz	
Power Factor Adjustment Range	-1 ~ +1	
Total Current Harmonic Distortion （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+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%	/

2-hour Energy Storage Solution　1MW/2MWh(2h)



4-hour Energy Storage Solution　0.5MW/2MWh(4h)





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

Seamless Scalability

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

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

Smart Cloud Management

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

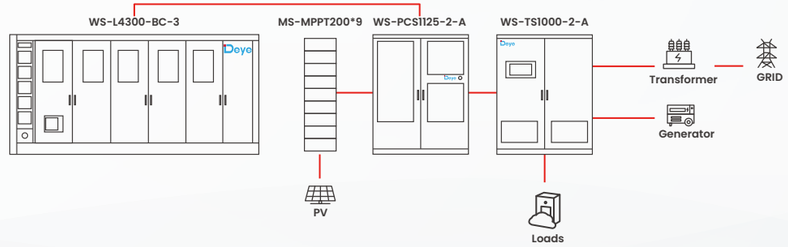
High Energy Density

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

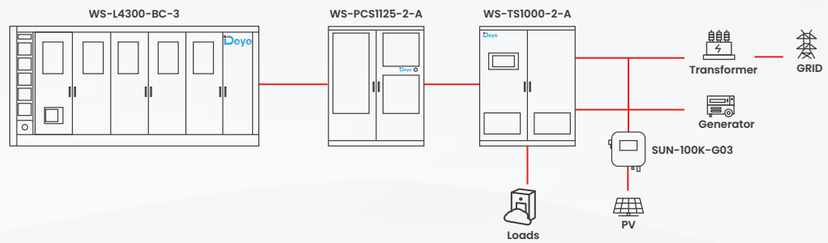
Cluster Management

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

PV-BESS DC-Coupled Solution



PV-BESS AC-Coupled Solution



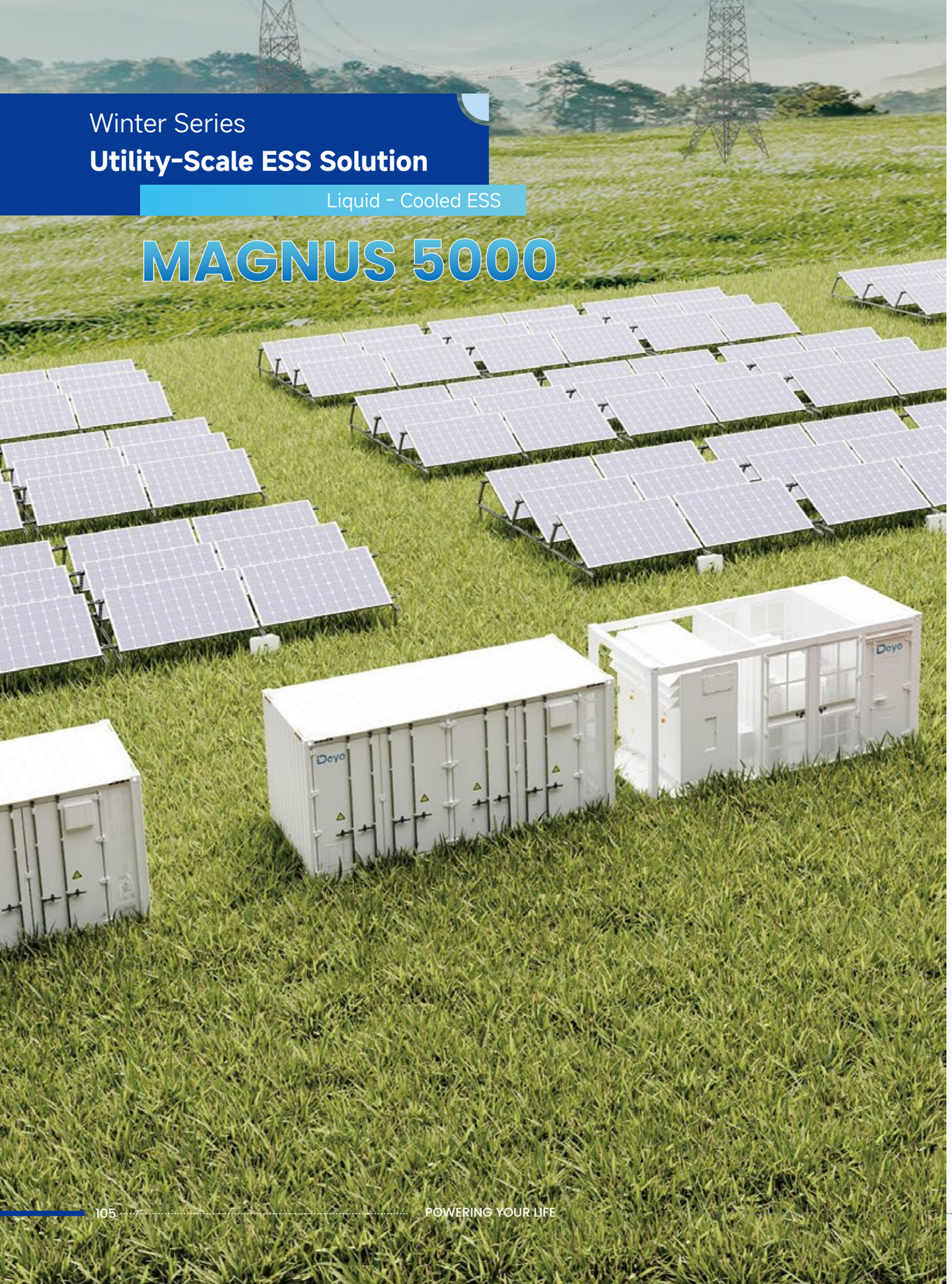
WS-L4300-BC-3-A (AS, AF, LATAM, EU)
WS-PCS1125-2-A & WS-TS1000-2-A (AS, AF, LATAM, EU)

Technical Data

Liquid-Cooled ESS	
Model	**WS-L4300-BC-3-A**
DC Battery	
Battery Type	$LiFePO_4$
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℃

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

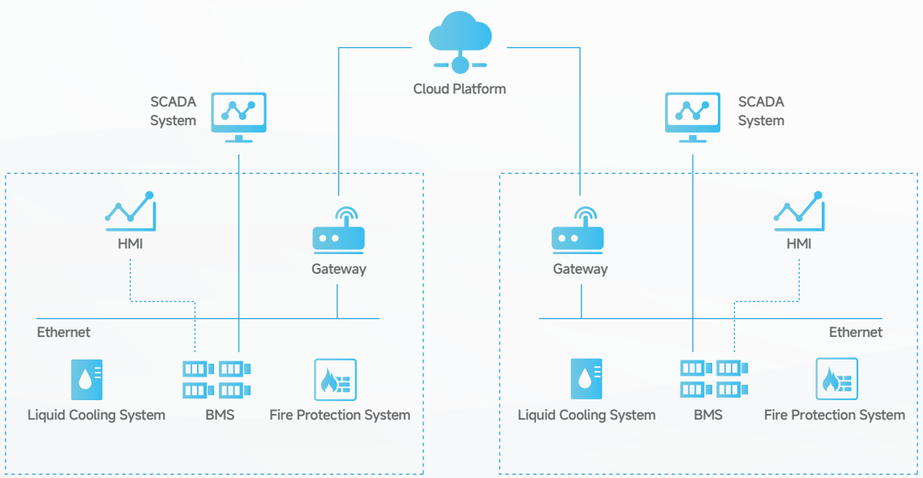
- Supports off-grid parallel operation and independently participates in grid black start
- Equipped with VSG, VF, PQ and other operating modes
- Supports application in various scenarios including high altitude, high salt spray, high temperature and extreme low temperature

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	$LiFePO_4$
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.