



Off-Grid ESS Solution

SE-F5 & SE-F5 Pro & SE-F12 & SUN-3/3.6/5/6K-OG01LP1-EU-AM2

SE-F5 & SE-F5 Pro & SE-F12

Comprehensive Protection

Advanced BMS with active fuse

Flexible Expansion

Max. 32 units in parallel

Superior Performance

Supports Max. 1.2C (6kW or 12kW) discharge, GaN MOSFETs: 50% loss reduction, high-temp resistance

Easy Maintenance

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

Optimized Energy Density

Integrated PACK: reduced line loss, enhanced energy density

Reliable Durability

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

SUN-3/3.6/5/6K-OG01LP1-EU-AM2

High Performance

Support a peak output of 2 times the rated power for up to 10 seconds

Outdoor-Ready

IP65-rated, built to withstand tough environments

Durable & Reliable

Independent cooling design reduces dust accumulation and extends lifespan

High Efficiency

4ms UPS-level switching time
Max. efficiency of 97.6% for optimal performance

Smart MPPT Technology

2 MPPTs, supports 1.6x PV oversizing (18A+18A), optimizing energy from panels at various angles

Long-Term Assurance

5-year warranty, extendable to 10 years for peace of mind

Parallel Scalability

Supports 16 pcs parallel (off-grid)

Generator Integration

Support storing energy from diesel generator

Model	SUN-3K-OG01LP1 -24-EU-AM2	SUN-3.6K-OG01LP1 -EU-AM2	SUN-5K-OG01LP1 -EU-AM2	SUN-6K-OG01LP1 -EU-AM2
Battery Input Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	20-30		40-60	
Max. Charging Current (A)	130	90	120	135
Max. Discharging Current (A)	130	90	120	135
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
Number of Battery Input	1			
PV String Input Data				
Max. PV Access Power (W)	6000	7200	10000	12000
Max. PV Input Power (W)	4800	5760	8000	9600
Max. PV Input Voltage (V)			500	
Start-up Voltage (V)			125	
PV Input Voltage(V)			125-500	
MPPT Voltage Range(V)			150-425	
Full Load MPPT Voltage Range(V)			300-425	
Rated PV Input Voltage (V)			370	
Max. Operating PV Input Current (A)	18		18+18	
Max. Input Short-Circuit Current (A)	27		27+27	
No. of MPP Trackers/No. of Strings MPP Tracker	1/1		2/1+1	
Max. Inverter Backfeed Current to The Array(A)			0	
AC Output Data				
Rated AC Output Power (VA/W)	3000	3600	5000	6000
Max. AC Output Power (VA/W)	3000	3600	5000	6000
Max. AC Output Current (A)	13.1	15.7	21.8	26.1
Peak Power (W)			2 times of rated power, 10s	
Rated Output Voltage (V)			230	
Output Type			L+N+PE	
Rated Output Frequency			50Hz / 60Hz	
Output Voltage Waveform			Pure Sine Wave	
Total Current Harmonic Distortion THDi			< 3%	
AC Input Date(Grid and Generator)				
Max. Input Power to Battery (W)	3000	3600	5000	6000
Rated Input Voltage (V)			230	
Rated Input Frequency			50Hz / 60Hz	
Gird Input Current (A)			35	
Generator Input Current (A)			35	
Efficiency				
Max. Efficiency			97.60%	
Euro Efficiency			96.50%	
MPPT Efficiency			>99%	
Equipment Protection				
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level			
Surge Protection Level	TYPE II(DC), TYPE II(AC)			
Interface				
LCD/LED Display	LCD			
Communication Interface	WIFI/RS485/CAN/Bluetooth			
General Data				
Max. Operating Frequency(Hz)			200M	
Operating Temperature Range (°C)			-40 to +60°C, >45°C Derating	
Permissible Ambient Humidity			0-100%	
Permissible Altitude			3000m	
Noise (dB)			<55	
Ingress Protection(IP) Rating			IP 65	
Inverter Topology			Non-Isolated	
Over Voltage Category			OVC II(DC), OVC III(AC)	
Cabinet Size (WxHxD mm)			306×427.5×175.77 (Excluding Connectors and Brackets)	
Weight (kg)			12.65	
Type of Cooling			Intelligent Air Cooling	
Warranty			Standard 5 years, extended warranty	
Safety / EMC Standard			IEC62109-1/2, EN61000-6-6, EN61000-6-3, EN61000-6-4	

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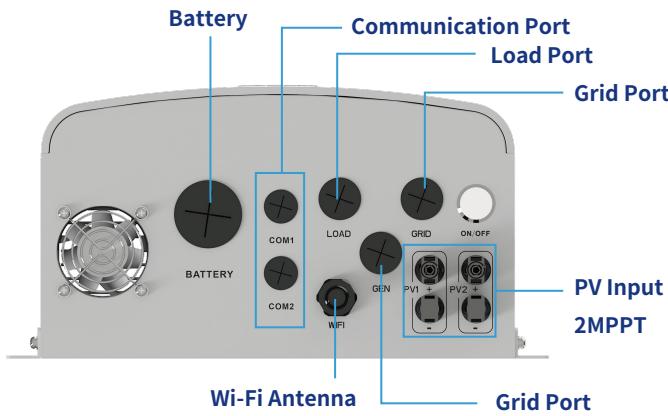


Model	SE-F5	SE-F5 Pro	SE-F12
Main Parameters			
Battery Chemistry			LiFePO ₄
Capacity ^[1]	100 Ah		230 Ah
Scalability	Max. 32 pcs in parallel		
Nominal Voltage	51.2 V		
Operating Voltage	44.8 V ~ 57.6 V		
Nominal Energy ^[1]	5.12 kWh		11.8 kWh
Charge Current ^[2]	50 A	100 A	115 A
	75 A (10 sec)	150 A (120 sec)	175 A (10 sec)
Discharge Current ^[2]	120 A	100 A	230 A
	150 A (10 sec)	150 A (120 sec)	280 A (10 sec)
Other Parameter			
Recommend Depth of Discharge	80% DoD	90% DoD	80% DoD
Dimension (W × H × D) (Without hanging board)	370 × 548 × 140 mm	404 × 547 × 141 mm	400 × 583 × 232 mm
Weight Approximate	41 kg	44 kg	82 kg
LED Indicator	LED (SOC, working, protecting) & Buzzer		
IP Rating of Enclosure	IP21		
Operating Temperature	Charge: 0~55°C / Discharge: -20°C~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, Stack-Mounted		
Communication	CAN2.0, RS485, Bluetooth+APP	CAN2.0, RS485, Optional module (WiFi+Bluetooth+APP)	CAN2.0, RS485, Bluetooth+APP
Warranty Period ^[3]	5 years	10 years	5 years
Energy Throughput ^[3]	8 MWh	16 MWh	18 MWh
Certification	UN38.3, MSDS	UN38.3, MSDS, CE, CB, VDE2510-50, FCC, UL1973, UL9540A, CEC	UN38.3, MSDS, CE, CB

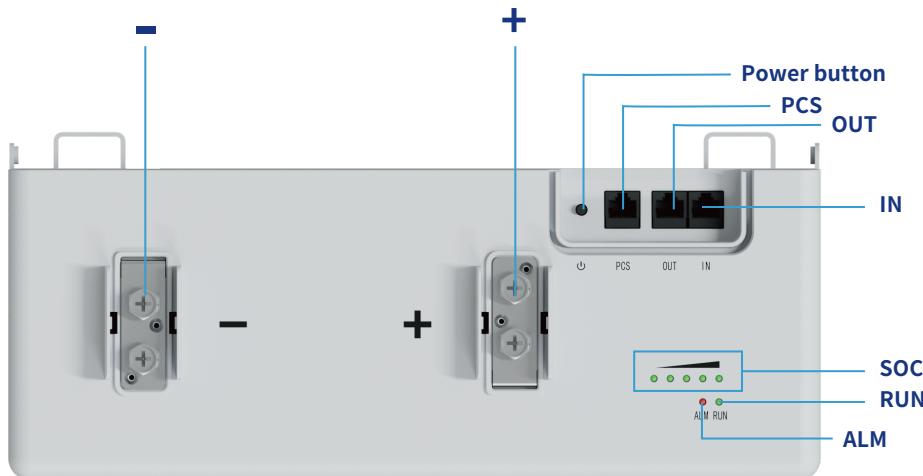
[1] Test conditions : 25°C±2°C, at beginning of life and calibration mode, 0.2C charge & 0.2C discharge, 100% DOD.

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

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



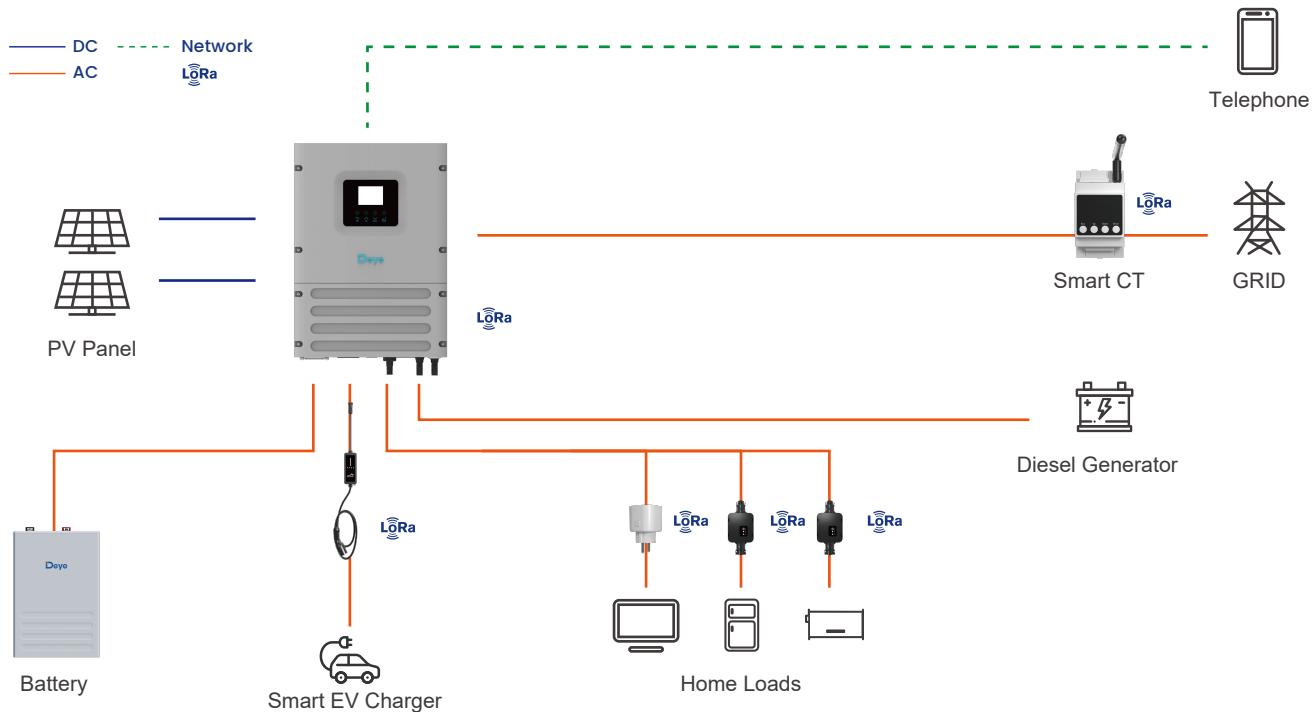
- ◎ Battery Port: Connects to the battery for energy storage, supporting 40-60V DC with a max charge/discharge current of 135A.
- ◎ Communication Port: Enables data exchange and system monitoring for seamless operation.
- ◎ Load Port: Delivers stable AC power to connected household loads.
- ◎ Grid Port: Links to the utility grid for energy exchange and system stability.
- ◎ Generator Port: Connects to a backup generator for additional power supply during outages.
- ◎ PV Input: Supports solar panel connection with 2 MPPTs, handling up to 9600W input power.
- ◎ Wi-Fi Antenna: Allows wireless connectivity for remote monitoring and system management.



- ◎ -: Battery negative terminal connection position.
- ◎ +: Battery positive terminal connection position.
- ◎ SOC: These 5 LEDs are used to display the pack SOC and charge or discharge state.
- ◎ RUN light: green LED lighting to show the battery running status.
- ◎ ALM light: red LED lighting to show the battery has been alarmed.
- ◎ Power button: Power on or off the control battery.
- ◎ PCS: Inverter communication terminal:(RJ45port) follow the CAN protocol (baud rate:500kbps),and RS485(baud rate:9600bps),used to output battery information to the inverter.
- ◎ OUT: parallel Communication Terminal:(RJ45port) Connect "IN"Terminal of Next battery,for Communication between multiple parallel batteries.
- ◎ IN: parallel Communication Terminal: (RJ45 port) Connect "OUT" Terminal of Previous battery,for Communication between multiple parallel batteries.

Deye Smart Energy Management System(Optional)

The Deye Smart Energy Management System enables seamless control with smart CT, smart plug, smart switch and solar EV charging, ensuring efficiency and full compatibility with Deye inverters.



Key Features

● Wireless Zero Export Control

Enables seamless zero export without the need for complex wiring, simplifying installation.

● Intelligent Load Control

Automatically manages loads based on time schedules and battery SOC, optimizing energy distribution.

● Solar-Powered EV Charging

Supports 100% solar charging with dynamic power adjustment for enhanced efficiency and sustainability.

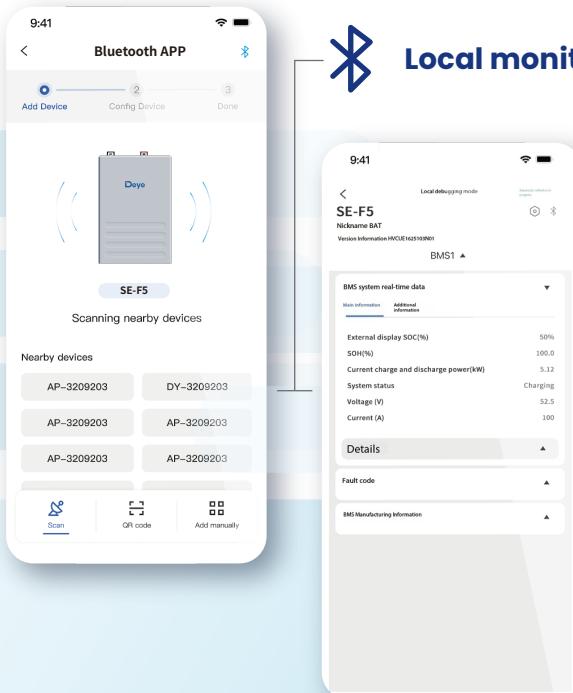
● Full Compatibility

All Deye hybrid inverters can be upgraded to support this system, ensuring seamless integration with existing setups.

● Precise Off-Grid Load Management

Ensures that only non-essential loads are disconnected during off-grid operation, maintaining power supply for critical applications.

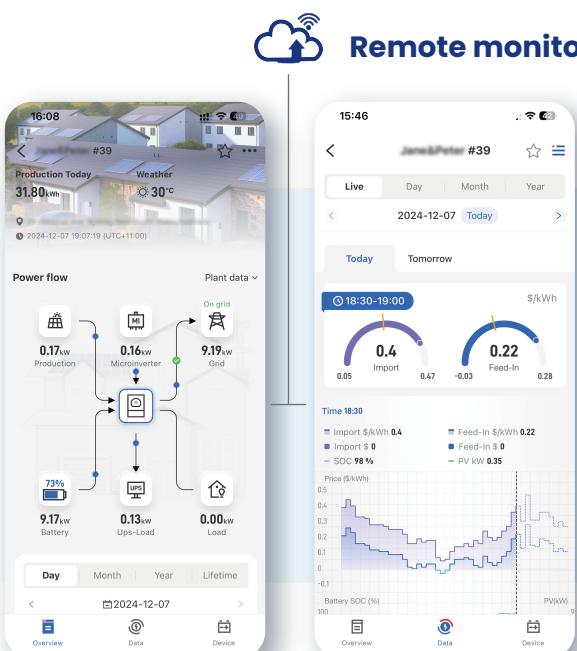




Quick Pairing

No Internet Needed

Portable Control



Real-time Equipment Monitoring

Intelligent Charging/Discharging Strategies

AI Data Analytics

Customized Maintenance

Smarten Up Your Home Energy



Download Deye APP to join us!

Embrace a seamless, effortless energy experience that's both ecofriendly and budget-friendly with our intelligent assistant

