ESS Solution

SE-F5 & SE-F5 Plus & SE-F5 Pro & SE-F12 & SE-F12 Max & SE-F16 & SE-F16 Max



- SE-F5 & F5 Plus
- SE-F5 Pro
- SE-F12
- SE-F16
- SE-F12 Max — IP65
- SE-F16 Max — IP65

SE-F5 & SE-F5 Plus & SE-F5 Pro & SE-F12 & SE-F12 Max & SE-F16 & SE-F16 Max

Comprehensive Protection
Advanced BMS with active fuse

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

Optimized Energy Density
Integrated PACK: reduced line loss, enhanced energy density

Flexible Expansion
Max. 32 units in parallel

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

Reliable Durability
Operates reliably in -20℃ to 55℃, natural cooling

ESS Solution



Model

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 Parameter					
Recommend Depth of Discharge		90% DoD			
Dimension (W × H × D) (Without hanging board)mm		400 × 559 × 233	464 x 767 x 244.5	400 × 708 × 233	464 x 914 x 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)			
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]		10 years	10 years	10 years	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.

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	90%	10years	404 × 547 × 141 mm
SE-F12	12.03kWh, 51.2V, 235Ah	1C/1C	90%	10years	400 × 559 × 233 mm
SE-F12 Max	12.03kWh, 51.2V, 235Ah	1C/1C	90%	10years	464 x 767 x 244.5 mm
SE-F16	16kWh, 51.2V, 314Ah	0.5C/0.7C	90%	10years	400 × 708 × 233 mm
SE-F16 Max	16kWh, 51.2V, 314Ah	0.5C/0.7C	90%	10years	464 x 914 x 244.5 mm

Mounting example

Stacked

Supports 6 layers in parallel (4 layers for SE-F16/F12 Max/F16 Max), allows multiple clusters in parallel



SE-F5 & SE-F5 Plus



SE-F5 Pro



SE-F12



SE-F16

Wall mounted

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



SE-F5 & SE-F5 Plus



SE-F5 Pro



SE-F12



SE-F16



SE-F12 Max



SE-F16 Max

Optional wheels available for SE-F12 & SE-F12 Max & SE-F16 & SE-F16 Max



SE-F12



SE-F16

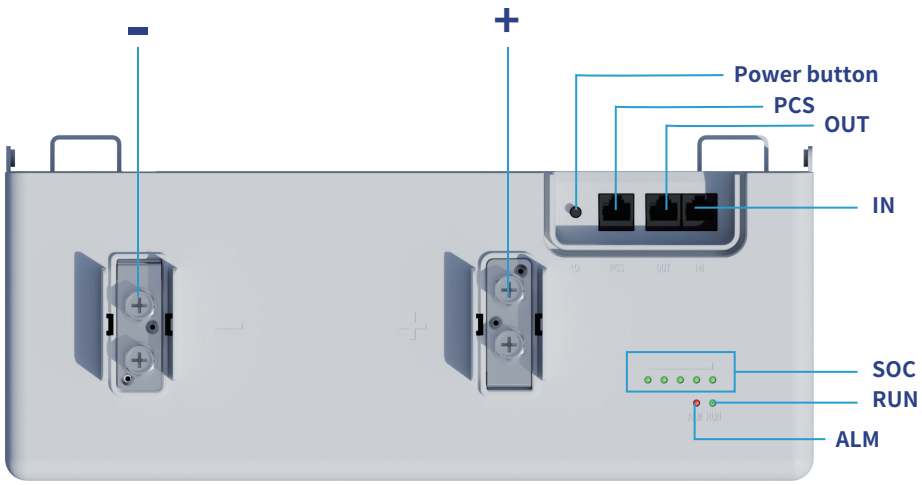


SE-F12 Max



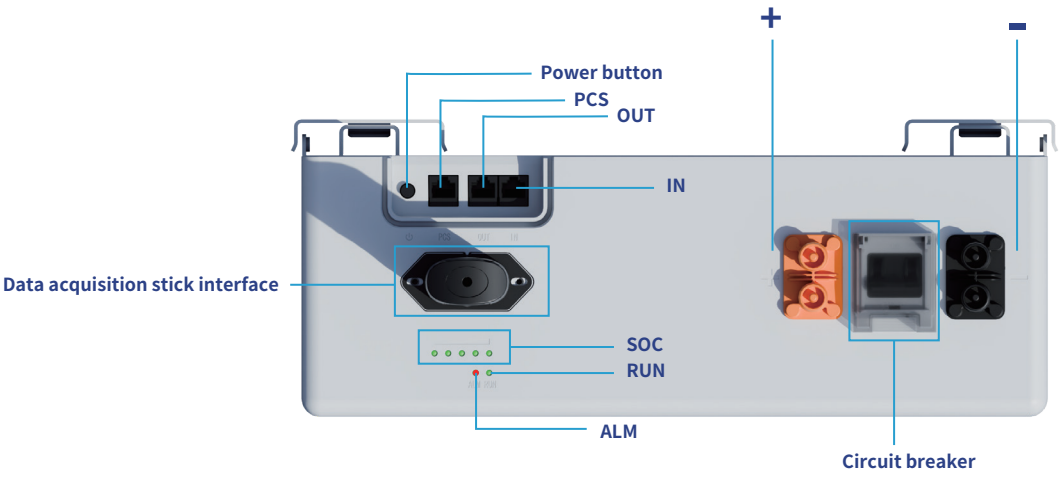
SE-F16 Max

Model	SE-F5 & SE-F5 Plus & SE-F12 & SE-F16



◎ -: 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.

Model	SE-F5 Pro



◎ -: Battery negative terminal connection position(Quickly plug and unplug).
◎ +: Battery positive terminal connection position(Quickly plug and unplug).
◎ 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.
◎ Circuit breaker: Used to manually control the connection between the battery rack and external devices.
◎ Data acquisition stick interface: The location to connect with your Data Logger that is used for data acquisition via WIFI or Bluetooth.