

ESS Solution

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



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

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Comprehensive Protection
 - Advanced BMS with active fuse
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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
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Flexible Expansion
 - Max. 32 units in parallel
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Easy Maintenance
 - Auto-networking, Local monitoring mode for battery, remote monitoring mode for ESS
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Reliable Durability
 - Operates reliably in -20°C to 55°C , natural cooling

ESS Solution



Model

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]	Max. Continuous		100 A	
	Peak	120 A (10 sec)		150 A (120 sec)
Discharge Current ^[2]	Max. Continuous	120 A		100 A
	Peak	150 A (10 sec)		150 A (120 sec)

Other Parameter

Recommend Depth of Discharge	80% DoD	90% DoD	90% DoD
Dimension (W × H × D) (Without hanging board)mm	370 × 548 × 140 mm		404 × 547 × 141 mm
Weight Approximate	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°C~55°C Discharge: -20°C~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, Optional module (WiFi+Bluetooth+APP)
Warranty Period ^[3]	5 years	10 years	
Energy Throughput ^[3]	8 MWh	16 MWh	
Certification	UN38.3, MSDS, CE, CB		UN38.3, MSDS, CE, CB, VDE2510-50, CEC

[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 x 547 x 141 mm
SE-F12	11.8kWh, 51.2V, 230Ah	1C/1C	90%	10years	400 x 583 x 233 mm
SE-F12 Max	11.8kWh, 51.2V, 230Ah	1C/1C	90%	10years	464 x 778 x 267 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	90%	10years	464 x 925 x 267 mm

Mounting example

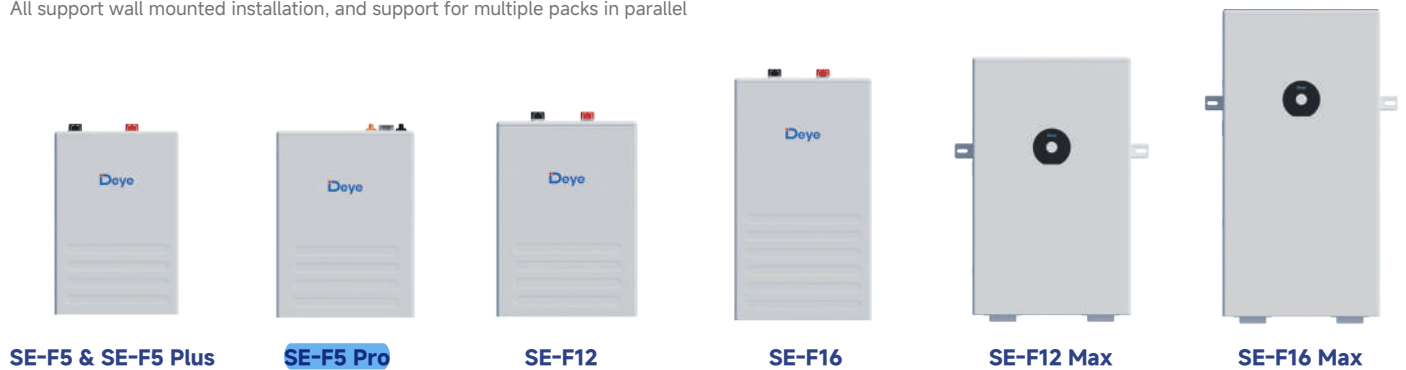
Stacked

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



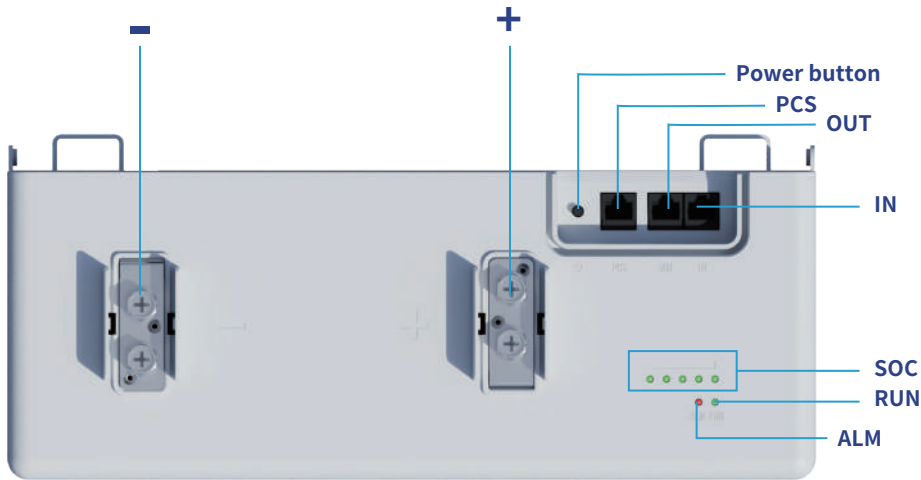
Wall mounted

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

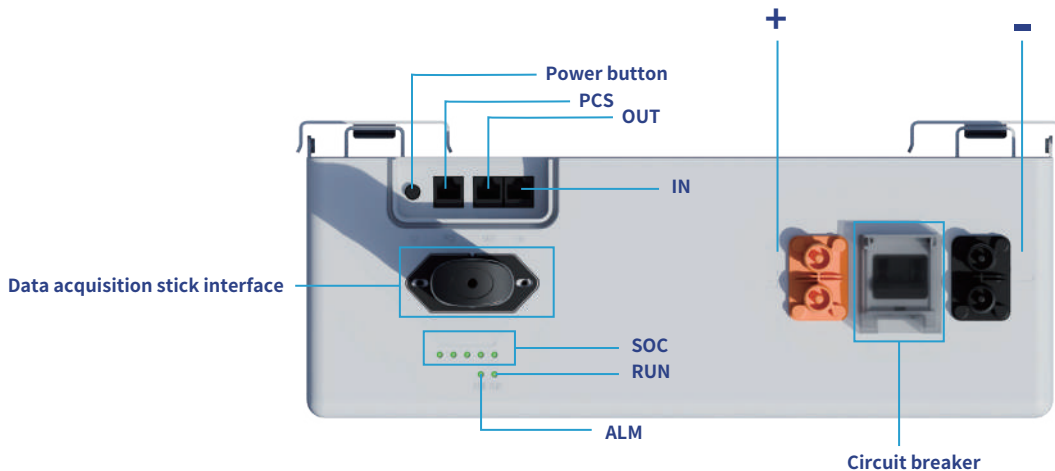


Optional wheels available for SE-F12 & SE-F12 Max & SE-F16 & SE-F16 Max



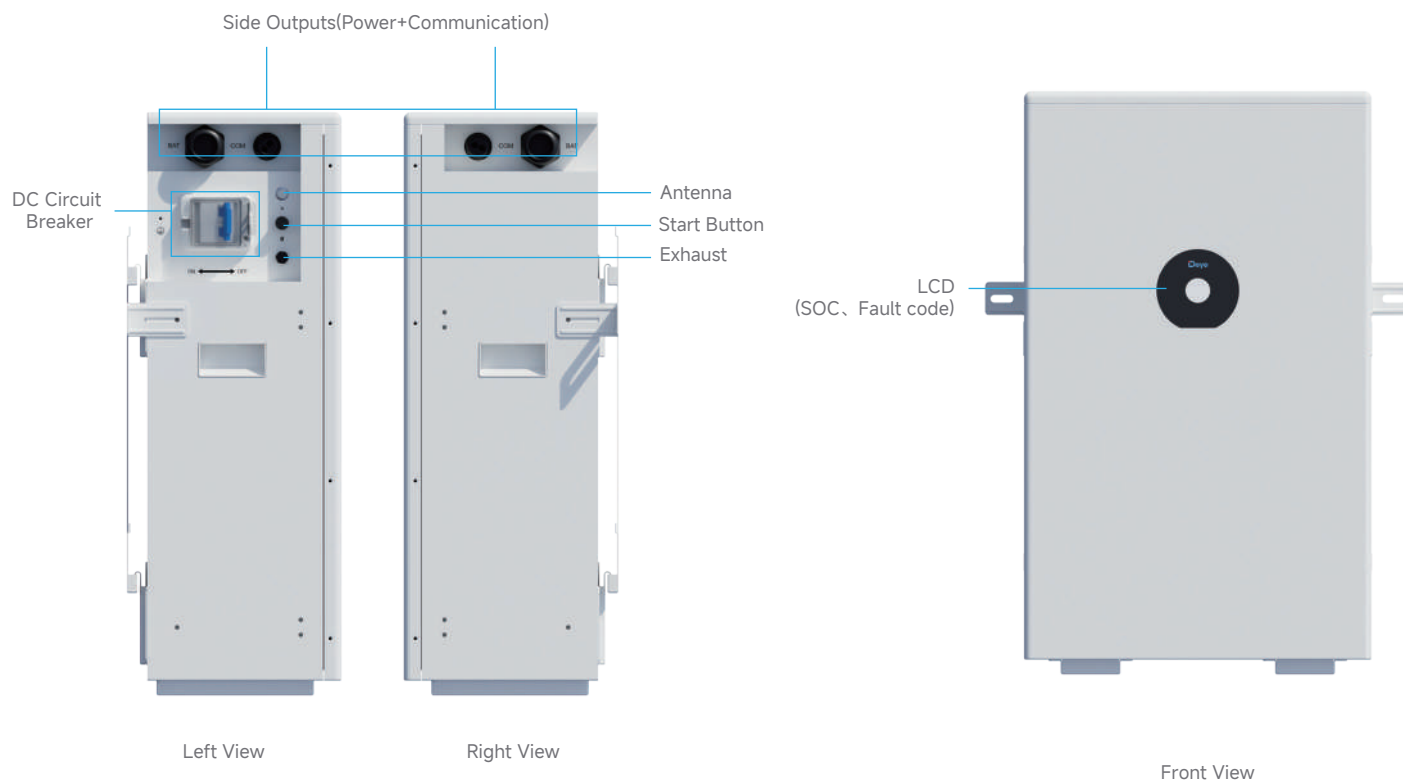


- ◎ -: Battery negative terminal connection position.
- ◎ +: Battery positive terminal connection position.
- ◎ SOC: These 5 LEDs are used to display the pack SOC and charge or discharge state.
- ◎ RUN light: green LED lighting to show the battery running status.
- ◎ ALM light: red LED lighting to show 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.

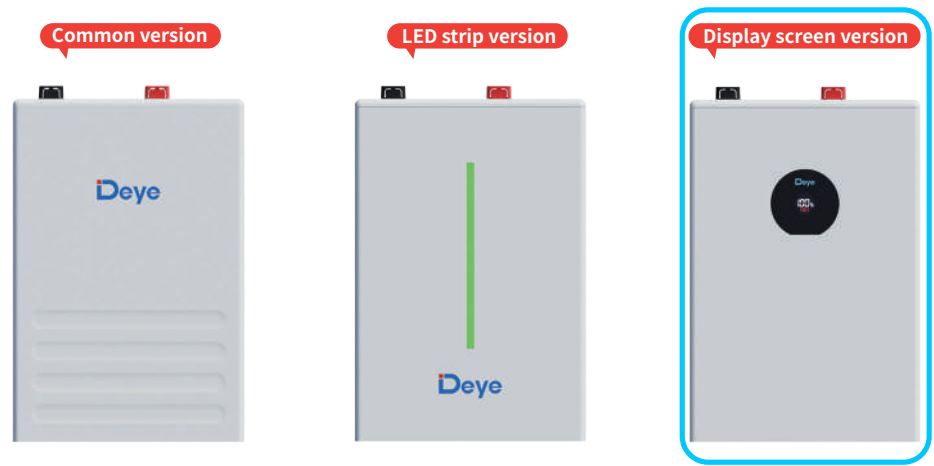


- ◎ -: Battery negative terminal connection position(Quickly plug and unplug).
- ◎ +: Battery positive terminal connection position(Quickly plug and unplug).
- ◎ SOC: These 5 LEDs are used to display the pack SOC and charge or discharge state.
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- ◎ 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.

Without Junction Box(SE-F12 Max & F16 Max)(For EU、AS、AF、LATAM)



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	O	



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