

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

-  **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°C to 55°C natural cooling

ESS Solution



Model

Main Parameters		SE-F5	SE-F5 Plus	SE-F5 Pro
Battery Chemistry		LiFePO		
Capacity		100 Ah		
Scalability [®]		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		
	Max. Continuous	100 A		
	Peak	120 A (10 sec)		150 A (120 sec)
Discharge Current ^[2]	Recommend	50 A		
	Max. Continuous			

Other Parameter	Peak	120 A	120 A
		150 A (10 sec)	150 A
	80% DoD		
		90% DoD	90%
		370 × 548 × 140 mm	404 ×
		41 kg	41 kg

Recommend Depth of Discharge			
Dimension (W × H × D) (Without hanging board)mm			
Weight Approximate			
LED Indicator	LED (SOC, working, protecting) & Buzzer		
IP Rating of Enclosure	IP21		
Operating Temperature	Charge: 0～55℃ / Discharge: -20～55℃	Charge: -10～55℃ / Discharge: -20～55℃	Charge: 0℃～55℃ Discharge: -20℃～55℃
Storage Temperature	0℃～35℃		
Relative Humidity	95% (non-condensing)		
Altitude	≤3000m		
Cycle Life			
Installation			
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, CE

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

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

≥6000(25℃±2℃,70%EOL)

Wall-Mounted, Floor-Mounted, Stack-Mounted

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



ESS Solution

Model

Main Parameters	SE-F12	SE-F12 Max	SE-F16	SE-F16 Max
Battery Chemistry	LiFePO ₄			
Capacity	44.8 V ~ 57.6 V			
Scalability ^[1]	Recommend Depth of Discharge 90% DoD			
Nominal Voltage				
Operating Voltage				
Nominal Energy				

		12.3kWh	24.6kWh
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

	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				
Storage Temperature	0℃~35℃			
Relative Humidity	95% (non-condensing)			
Altitude	≤3000m			
Cycle Life	≥6000(25℃±2℃ ,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, UL1973, UL9540A, UL9540-DC, FCC

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

[2] Operating current is affected by temperature and SOC.
Dimension (W × H × D) (Without hanging board)mm

Charge: 0～55℃ (-20～55℃ 12 Max/16 Max with Optional heating) Discharge: -20～55℃

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

Product comparison

Model	Nominal Energy	Charge / Discharge	DoD Rate	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 767 x 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	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