

ESS Solution

SE-F12 Max & F16 Max



• SE-F12 Max

IP65

• SE-F16 Max

IP65

Safer & Reliable

Lithium Iron Phosphate (LFP) Battery, safety and long lifespan.
Built-in intelligent BMS with active fuse, providing complete protection.
Intelligent thermal management, IP65/NEMA 3R, wide temperature range: -20°C to 55°C/-4°F to 131°F.



Convenient & Smart

Battery module auto networking (No DIP switchs), easy to use.
Support Deye Cloud remotely monitoring and upgrade via Deye Inverter.
Support local Bluetooth APP monitoring and upgrade.

Flexible

Modular design, easy to expand, Max. 32 units in parallel.
Suited to residential and small commercial applications for increasing the self-consumption ratio.



Ultra-efficient

Support Max. 1C charge & 1C discharge, Max. 11.8kW output power (SE-F12 Max).
Support Max. 0.5C charge & 0.7C discharge, Max. 11.8kW output power (SE-F16 Max).
Integrated PACK design reduces line loss and increases energy density.

Wall-Mounted & Floor-Mounted

Flat design, support wall-mounted and Floor-mounted, saving installation space.

ESS SOLUTION



Model	SE-F12 Max	SE-F16 Max
Main Parameters		
Battery Chemistry	LiFePO ₄	
Rated Capacity (Ah) ^[1]	230	314
Scalability ^[2]	Max. 32 pcs in parallel	
Nominal Voltage (V)	51.2	
Operating Voltage(V)	44.8 - 57.6	
Nominal Energy (kWh)	11.8	16
Usable Energy (kWh) ^[1]	11.8	16
Max. Output Power (kW)	11.8	
Charge Current(A) ^[3]	Max. Continuous Peak	230 280 (10 sec)
Discharge Current(A) ^[3]	Max. Continuous Peak	230 280 (10 sec)
Other Parameter		
Recommend Depth of Discharge	90% DoD	
Dimension (W/H/D,mm/in)(Without hanging board and terminals)	464*767*244.5/18.3" x 30.2" x 9.63"	464*914*244.5/18.3" x 36.0" x 9.63"
Weight Approx. (kg/lbs)	≈93/205.03	≈118/260.15
Display	LCD(SOC, Alarm), LED (Working)	
Ingress Protection Rating/Enclosure Rating	IP65/NEMA 3R	
Operating Temperature	Charge: 0°C~55°C/32°F~131°F (-20°C~55°C/-4°F~131°F, with Optional heating), Discharge: -20°C - +55°C/-4°F~131°F	
Storage Temperature	0°C~35°C/32°F~95°F	
Relative Humidity	0~95%	
Altitude (m/ft)	≤3000/9843	
Cycle Life	≥6000(25°C±2°C/77°F ±35.6°F ,70%EOL)	
Max. Energy RTE (DC) ^[1]	95%	
Isolation Protection	Built-in Circuit Breaker	
Installation	Wall-Mounted, Floor-Mounted	
Communication	CAN2.0, RS485, Bluetooth	
Certification	UN38.3, CE, CB	UN38.3, CE, CB, UL1973, UL9540A, UL9540-DC, FCC
Energy Throughput ^[4]	37 MWh	50 MWh
Warranty Period ^[4]	10 years	

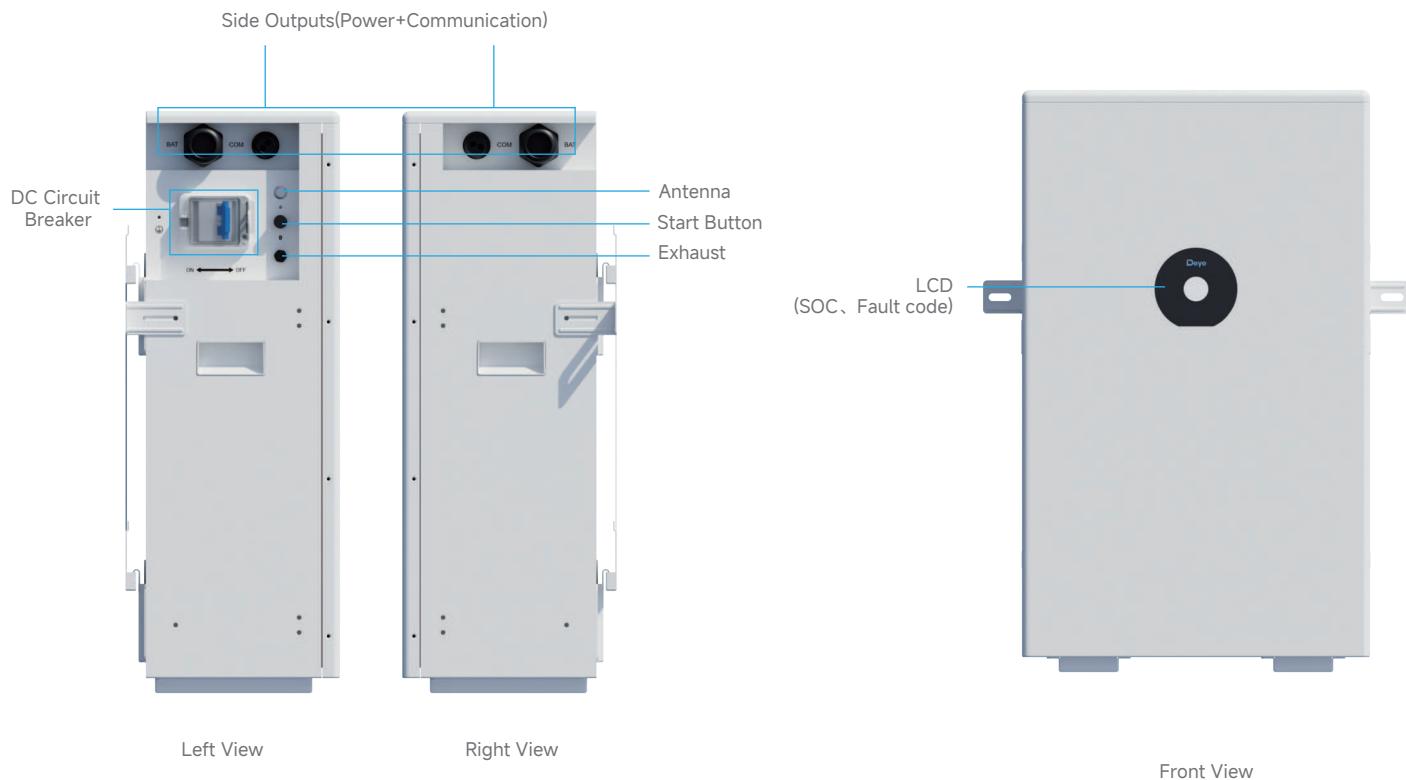
[1] Test conditions : 25°C±2°C/77°F ±35.6°F , at beginning of life, 0.5C charge & 0.5C discharge,100% DOD.

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

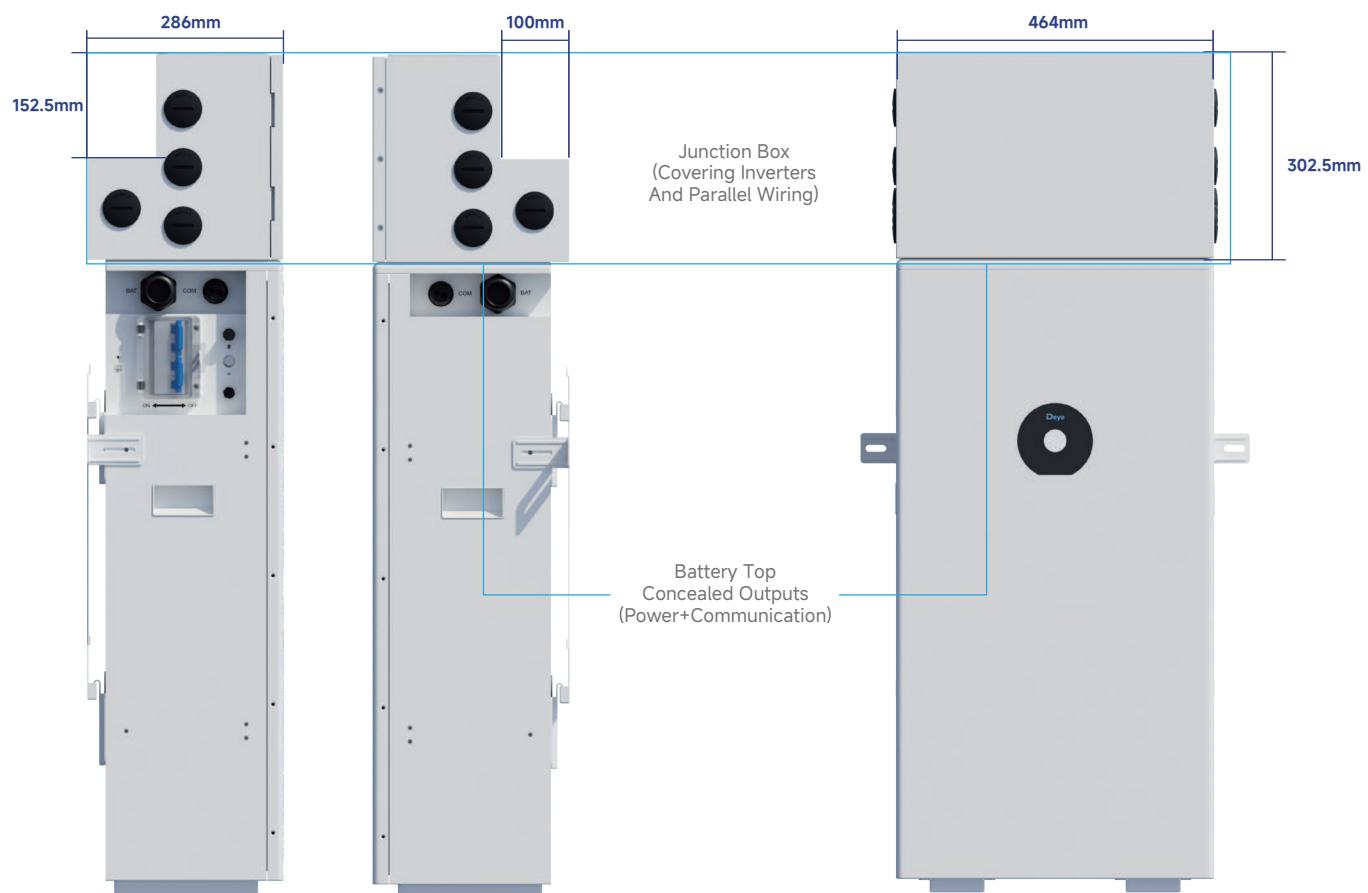
[3] The current is affected by temperature and SOC.

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

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

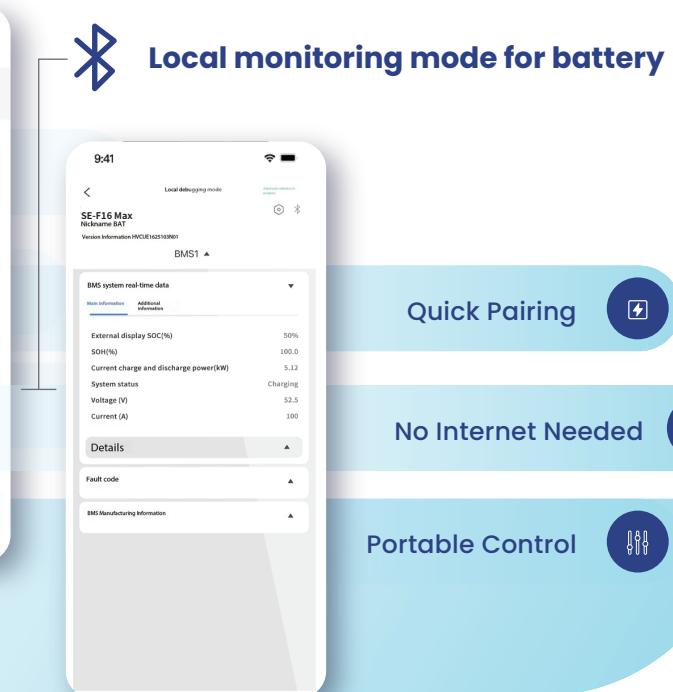


With Junction Box(SE-F16 Max) (For NA, 1000A)





Bluetooth APP Monitoring



Local monitoring mode for battery

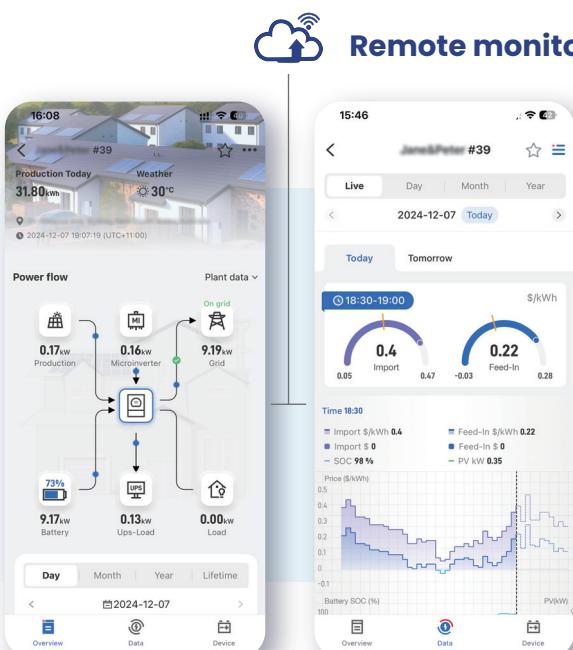
Low Power (Bluetooth LE)

Automated upgrade

Quick Pairing

No Internet Needed

Portable Control



Remote monitoring mode for ESS (Deye Inverter & Battery)

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

