



NEPT S

RESIDENTIAL ESS SOLUTION

SE-F12-A



Comprehensive Protection

— Advanced BMS with active fuse



Superior Performance

— Support Max. 230A charge & discharge



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

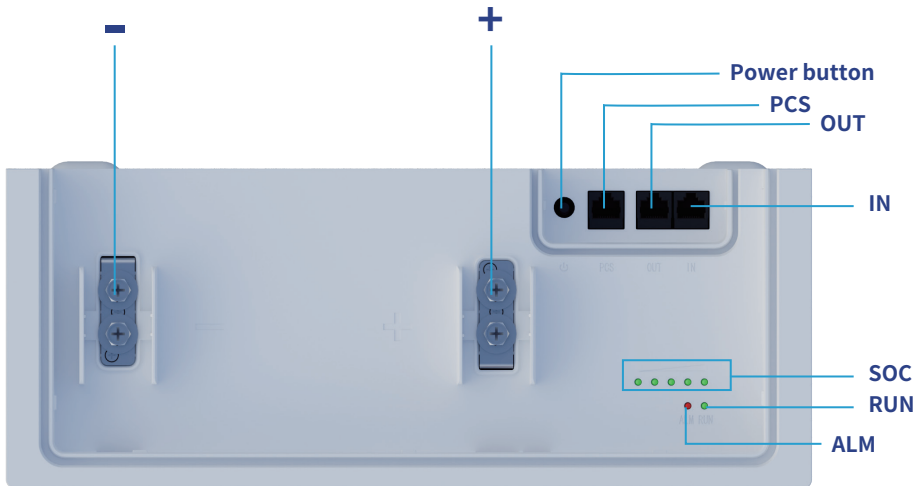
— Operates reliably in -20°C to 55°C , natural cooling

Model		
Main Parameters		SE-F12-A
Battery Chemistry		LiFePO ₄
Capacity		235 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
Charge Current ^[2]	Recommend	115 A
	Max. Continuous	230 A
	Peak	280A(10 sec)
Discharge Current ^[2]	Recommend	115 A
	Max. Continuous	230 A
	Peak	280A(10 sec)
Other Parameter		
Recommend Depth of Discharge		90% DoD
Dimension (W × H × D) (Without hanging board)mm		400 x 594 x 233
Weight Approximate		84 kg
LED Indicator		LED (SOC, working, protecting) & Buzzer
IP Rating of Enclosure		IP21
Operating Temperature		Charge :0~55°C/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
Warranty Period ^[3]		5 Years / 10 Years The warranty period depends on the final installation site of the battery system. For more information, please refer to the warranty policy.
Energy Throughput ^[3]		37 MWh
Certification		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.



◎ -: 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.

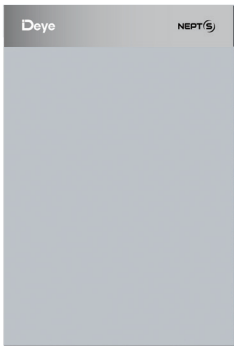
◎ PCS: Inverter communication terminal:(RJ45port) follow the CAN protocol (baud rate:500kbps),and RS485(baud rate:9600bps),used to output battery information to the inverter.

◎ OUT: parallel Communication Terminal:(RJ45port) Connect "IN"Terminal of Next battery,for Communication between multiple parallel batteries.

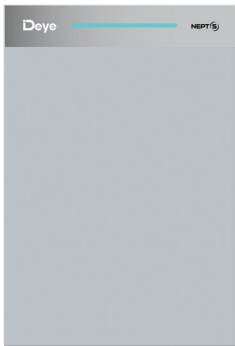
◎ IN: parallel Communication Terminal: (RJ45 port) Connect "OUT" Terminal of Previous battery,for Communication between multiple parallel batteries.

SE-F Series Model Selection and Appearance Reference

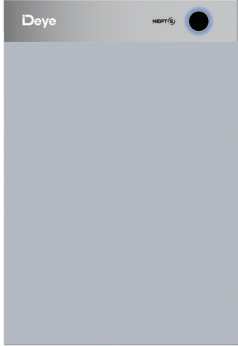
Common version



LED strip version



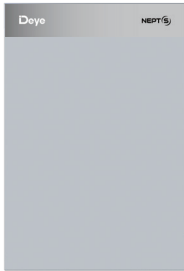
Display screen version



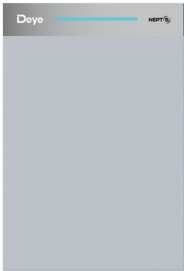
Config Version

Reference

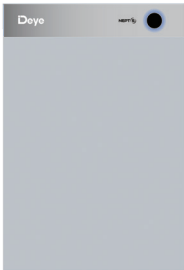
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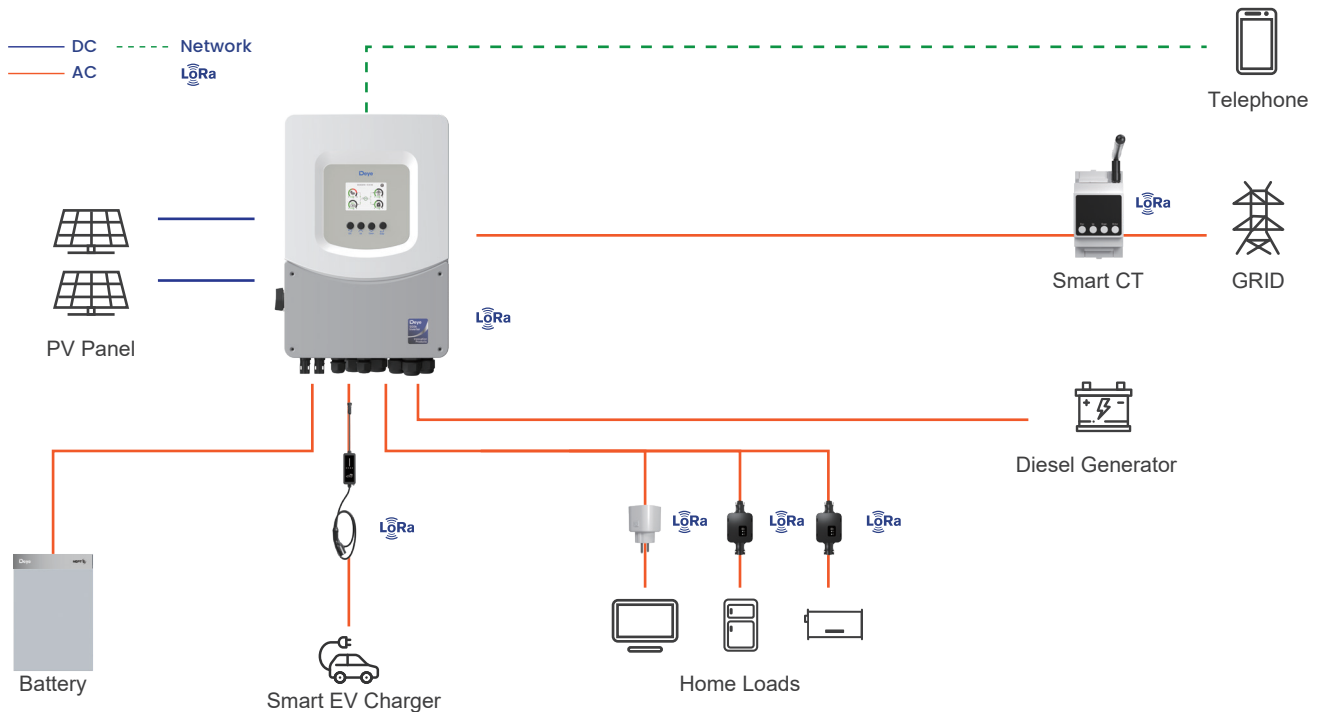


C



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.



Deye APP



Bluetooth APP Monitoring



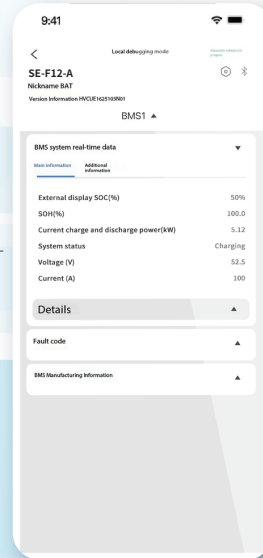
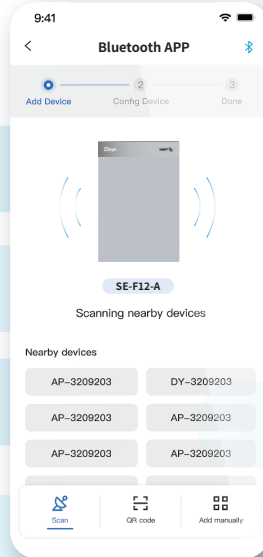
Low Power (Bluetooth LE)



Automated upgrade



Local monitoring mode for battery



Quick Pairing



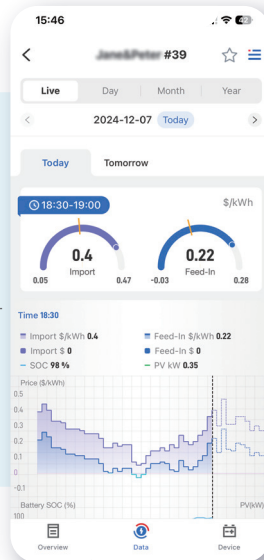
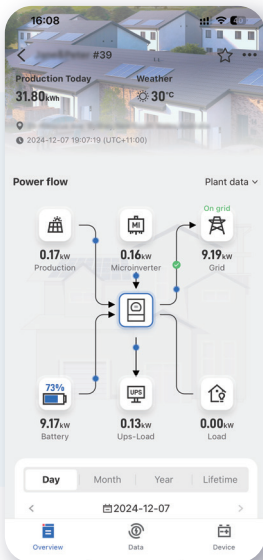
No Internet Needed



Portable Control



Remote monitoring mode for ESS(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





POWERING YOUR LIFE



www.deyeess.com / www.deyeinverter.com



Deye ESS / Deye New Energy