

NEPT S

RESIDENTIAL ESS SOLUTION

SE-F16-A

Comprehensive Protection
Advanced BMS with active fuse

Superior Performance
Support Max.160A charge & 230A 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℃ to 55℃, natural cooling

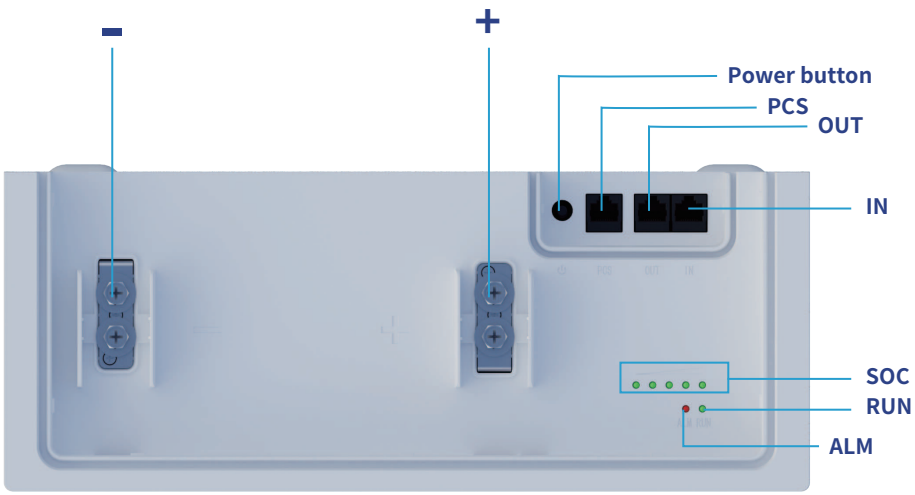
Model		SE-F16-A
Main Parameters		
Battery Chemistry		$LiFePO_4$
Capacity		314 Ah
Scalability [1]		Max. 32 pcs in parallel
Nominal Voltage		51.2 V
Operating Voltage		44.8 V ~ 57.6 V
Nominal Energy		16 kWh
Charge Current [2]	Recommend	95 A
	Max. Continuous	160 A
	Peak	280A(10 sec)
Discharge Current [2]	Recommend	157 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 737 x 233
Weight Approximate		109 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		≥8000(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]		50 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.

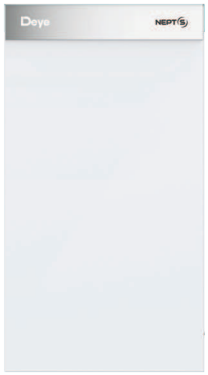
Model



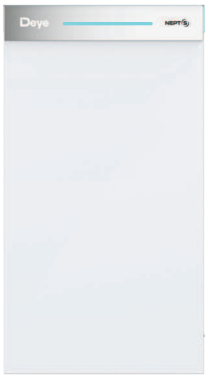
◎ -: Battery negative terminal connection position.
◎ +: Battery positive terminal connection position.
◎ SOC: These 5 LEDs are used to display the pack SOC and charge or discharge state.
◎ RUN light: green LED lighting to show the battery running status.
◎ ALM light: red LED lighting to show the battery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

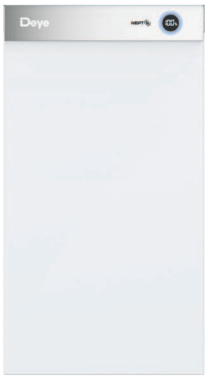
Common version

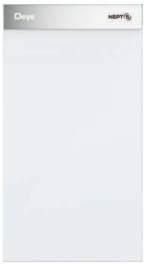
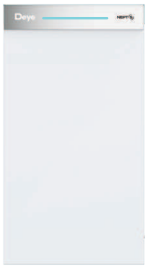
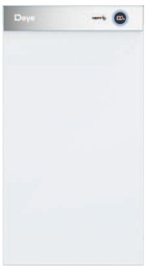


LED strip version



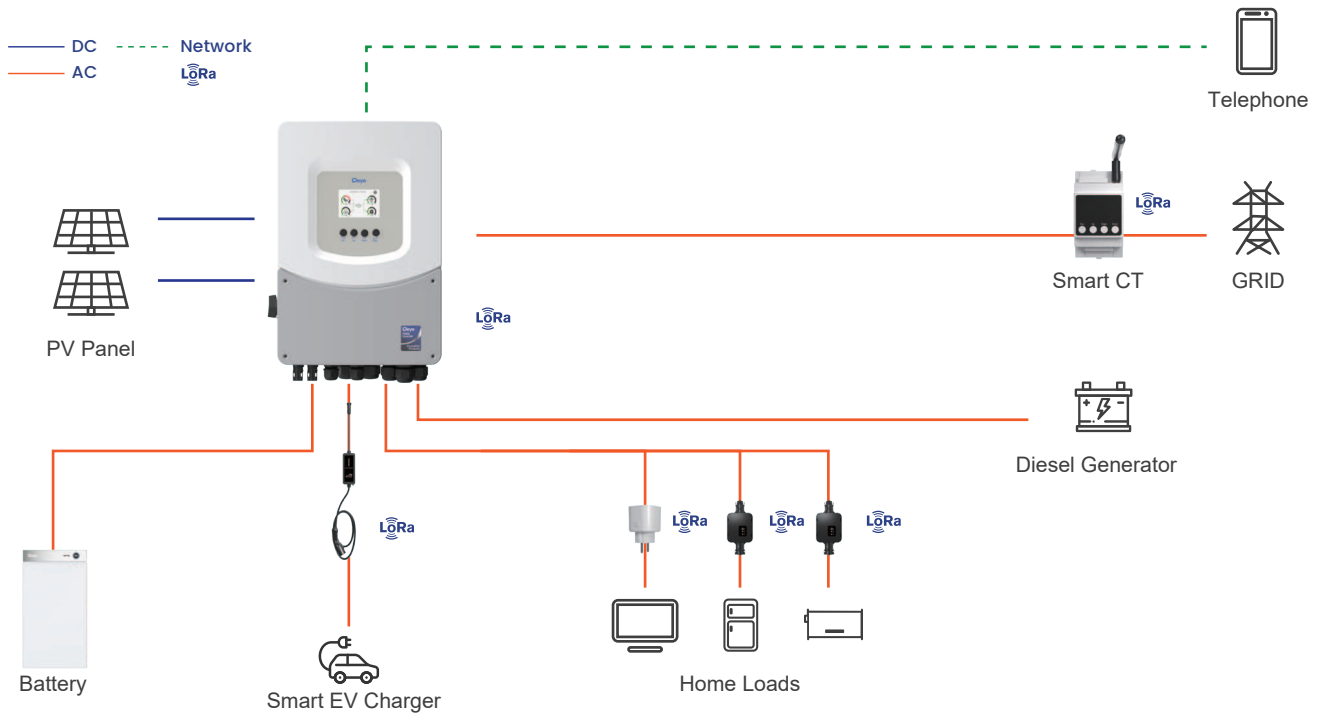
Display screen version



Config Version	Reference
L	
E	
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.

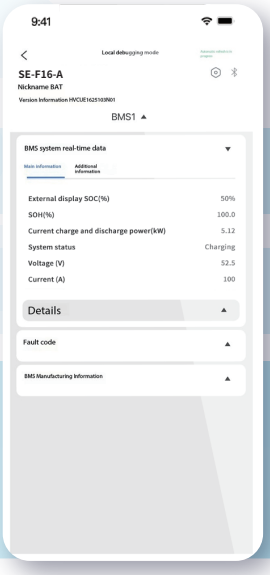


Deye APP

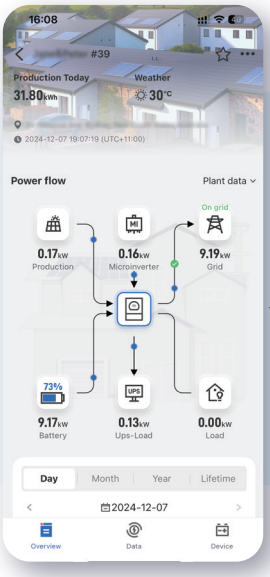
Local monitoring mode for battery

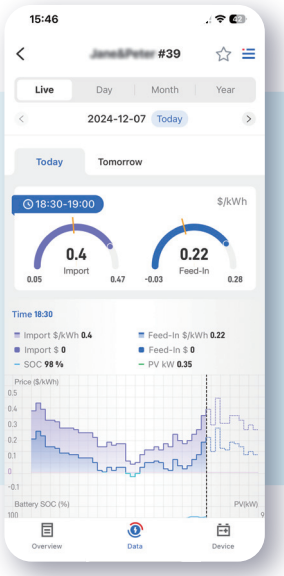
- Bluetooth APP Monitoring
- Low Power (Bluetooth LE)
- Automated upgrade
- Quick Pairing
- No Internet Needed
- Portable Control





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

Deye

POWERING YOUR LIFE

www.deyeess.com / www.deyeinverter.com

Deye ESS / Deye New Energy