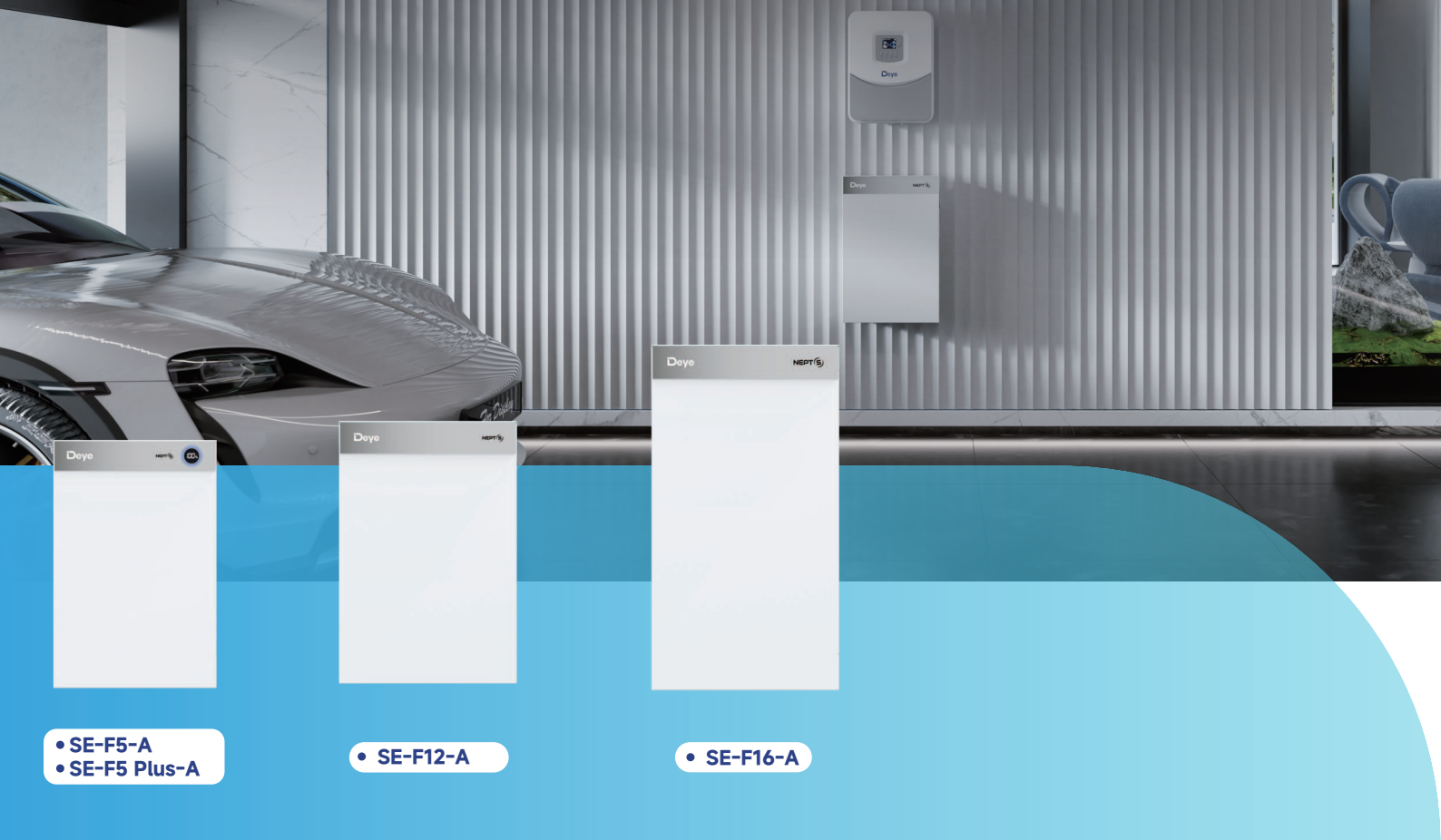


NEPT S RESIDENTIAL ESS SOLUTION



- SE-F5-A
- SE-F5 Plus-A

- SE-F12-A

- SE-F16-A

SE-F5-A & SE-F5 Plus-A & SE-F12-A & SE-F16-A



Comprehensive Protection

Advanced BMS with active fuse



Superior Performance

Support Max. 1C charge & discharge (SE-F5-A & SE-F5 Plus-A),
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-A	SE-F5 Plus-A
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]	Recommend	50A	
	Max. Continuous	100 A	
	Peak	120A (10 sec)	
Discharge Current ^[2]	Recommend	50A	
	Max. Continuous	100 A	
	Peak	120A (10 sec)	

Other Parameter

Recommend Depth of Discharge	80% DoD	90% DoD
Dimension (W × H × D) (Without hanging board)	360 x 545 x 142.5 mm	
Weight Approximate	41 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
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	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]	8 MWh	16 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.

ESS Solution



Model

Main Parameters

		SE-F12-A	SE-F16-A
Battery Chemistry		LiFePO ₄	
Capacity		235 Ah	314 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	16 kWh
Charge Current ^[2]	Recommend	115 A	95 A
	Max. Continuous	230 A	160 A
	Peak	280A(10 sec)	
Discharge Current ^[2]	Recommend	115 A	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)		400 x 594 x 233mm	400 x 737 x 233mm
Weight Approximate		84 kg	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		≥6000(25°C±2°C ,70%EOL)	≥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]		37 MWh	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.

Product comparison

Model	Nominal Energy	Charge / Discharge Rate	DoD	Warranty	Size
SE-F5-A	5. 12kWh, 51. 2V, 100Ah	1C/1C	80%	5 years	360 x 545 x 142.5mm
SE-F5 Plus-A	5.12kWh, 51.2V, 100Ah	1C/1C	90%	5/10 years	360 x 545 x 142.5mm
SE-F12-A	12.03kWh, 51.2V,235Ah	1C/1C	90%	5/10 years	400 x 594 x 233mm
SE-F16-A	16kWh, 51.2V, 314Ah	0.5C/0.7C	90%	5/10 years	400 x 737 x 233mm

Mounting example

Stacked

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



SE-F5-A & SE-F5 Plus-A



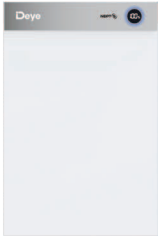
SE-F12-A



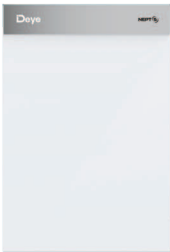
SE-F16-A

Wall mounted

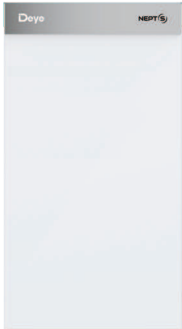
All support wall mounted installation, and support for multiple packs in parallel



SE-F5-A & SE-F5 Plus-A

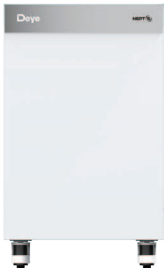


SE-F12-A

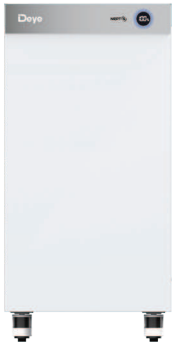


SE-F16-A

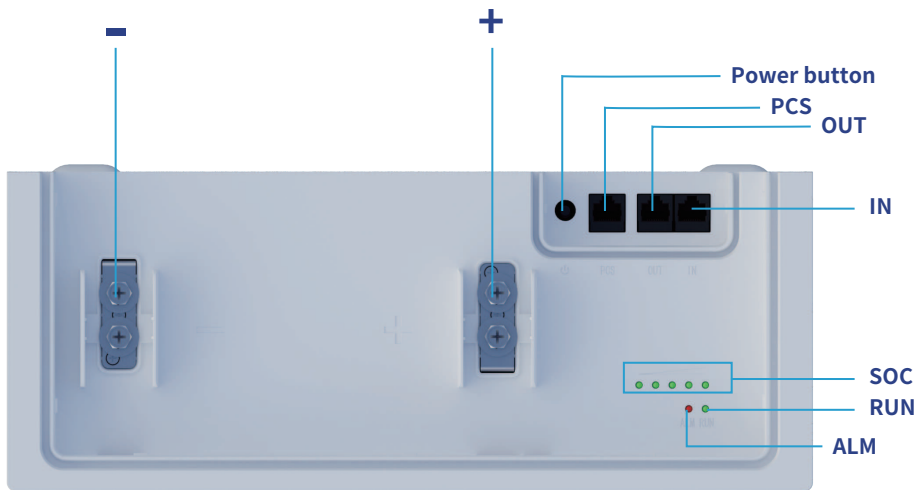
Optional wheels available for SE-F12-A & SE-F16-A



SE-F12-A



SE-F16-A



◎ -: 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 .

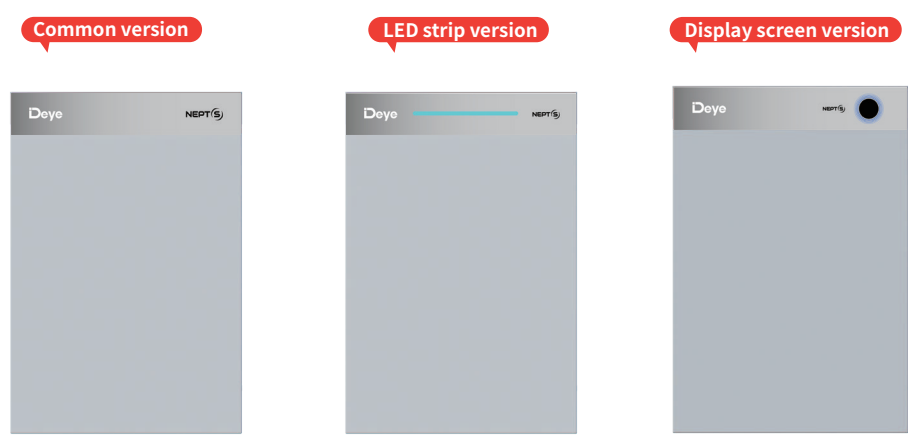
◎ Power button: Power on or off the control battery.

◎ 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.

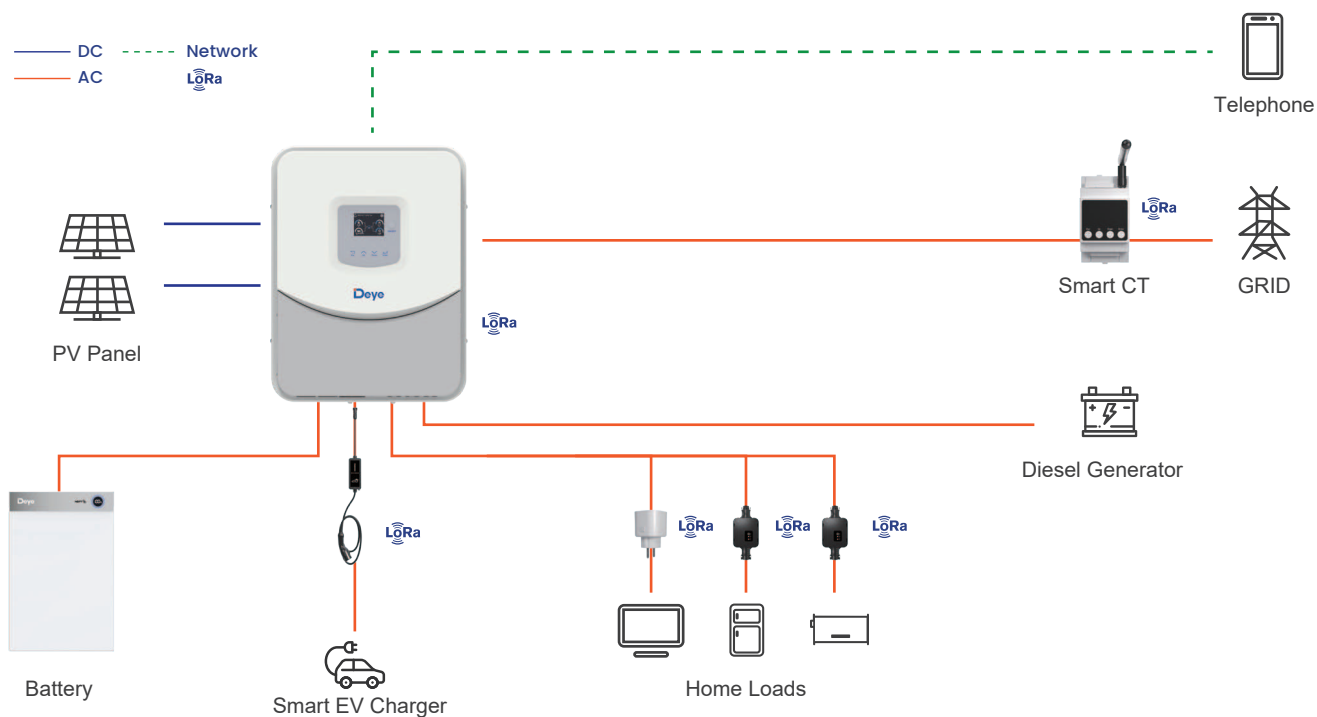
SE-F Series Model Selection and Appearance Reference



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



Bluetooth APP Monitoring



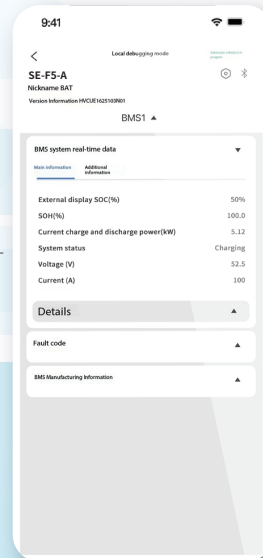
Low Power (Bluetooth LE)



Automated upgrade



Local monitoring mode for battery



Quick Pairing



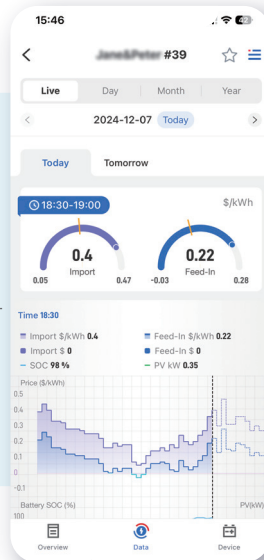
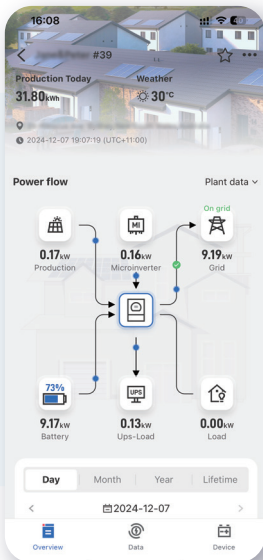
No Internet Needed



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