



NEW

SE-F Series

RESS Battery (Low-Voltage)

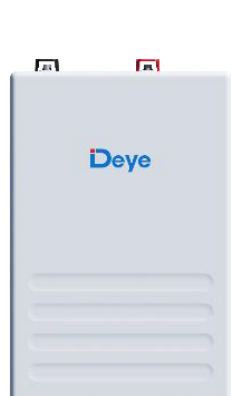
SE-F5 Pro/F5 Plus/F5/F12/16
Product Introduction

June, 2025





Product Features



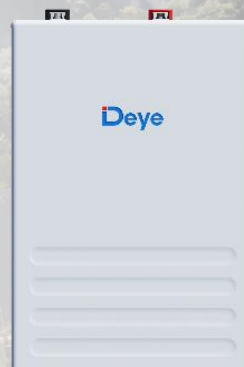
SE-F5



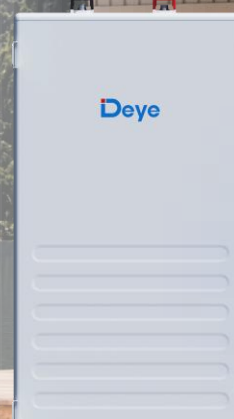
SE-F5 Plus



SE-F5 Pro



SE-F12



SE-F16

RESS Product Features



Comprehensive Protection

Advanced **BMS** with active fuse protection



Highly integrated

Integrated Pack and CCS reduce wiring harness loss and cost control



Intelligent O&M

Quick pairing, local monitoring + ESS remote monitoring



Superior Performance

Support Max. **1C** charge & **1.2C** discharge (SE-F5 & F5 Plus), GaN MOSFETs: **50%** loss reduction, high-temp resistance



Flexible Expansion

Up to **32** expandable units, suitable for household use, small commercial scenarios



Reliable Durability

Operates reliably in **-20°C to 55°C**, natural cooling
≥6000 cycles @70%EOL

Product Features

Deye



Anti-overcharge

Real-time monitoring of battery cell voltage, cutting off charging current when reaching the upper limit to prevent battery expansion or damage



Anti-short circuit

Quickly disconnect with active fuse to protect battery cells and system safety



Anti-overheat

Detect temperature anomalies and automatically limit current or shut down the system



Anti-overdischarge

Detect the lower limit of battery cell voltage to avoid excessive discharge leading to battery capacity loss or failure

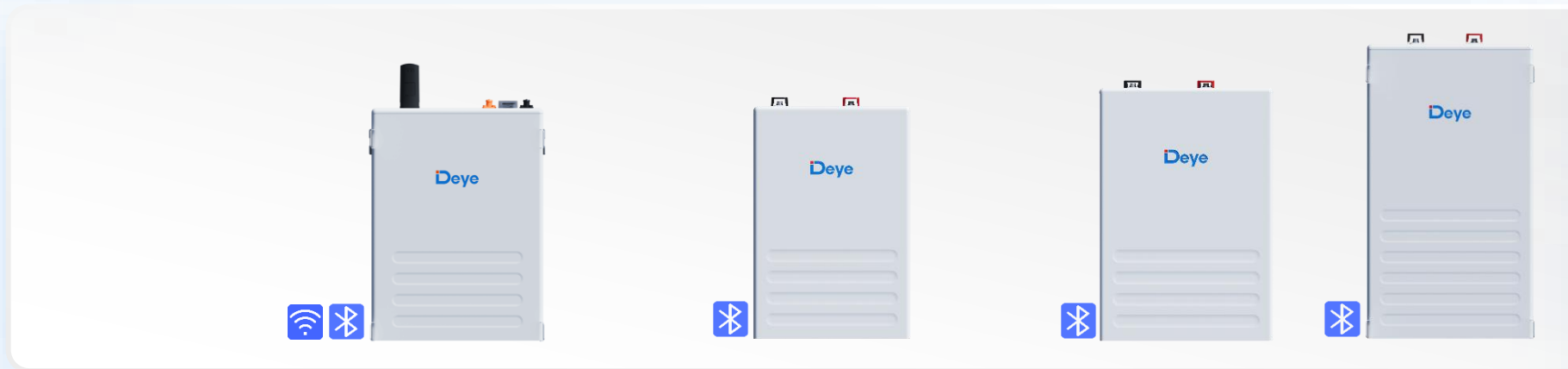


Thermal Runaway Prevention

Advanced internal insulation design, rigorously tested and validated to eliminate risks of fire and explosion

Optional extended warranty: 5 to 10 years

Product Overview



Bluetooth Equipped (All models)
Local monitoring via App

SE-F5 Pro supports optional WIFI
data collector for remote
monitoring via App and cloud

Operating Voltage:
51.2V(44.8~57.6V)

IP21, indoor installation

External support CAN2.0, RS485
communication

Model	SE-F5 Pro	SE-F5 Plus	SE-F5	SE-F12	SE-F16
Nominal Voltage	5.12kWh			11.8kWh	16kWh
Capacity	100Ah LFP*1	100Ah LFP*2	100Ah LFP	230Ah LFP	314Ah LFP
Charge Temperature	0~55℃	-10~55℃	0~55℃		
Discharge Temperature	-20~55℃	-20~55℃	-20~55℃		
Max. Charge/Discharge Current*3	100A/100A Peak:150A/150A (120s)	100A/120A Peak::120A/150A (10s)		230A/230A Peak: 280A/280A (10s)	160A/230A Peak: 280A/280A (10s)
DOD	90%	90%	80%	90%	
Dimension*4	W404 × H547 × D141mm	W370 × H548 × D140mm		W400 × H559 × D233mm	W400 × H708 × D233mm
Weight	44kg	41kg		84kg	109kg
Warranty	5 Years	5 years	5 Years	5 Years	
Certification	UN38.3, MSDS, CE, CB, VDE2510-50, FCC, UL1973, UL9540A, CEC	UN38.3, MSDS, CE, CB			

*1: long cycle

*2: Low-temperature long cycle

*3: Lithium-ion mode, the operating current is
affected by temperature and SOC

*4: Without hanging board

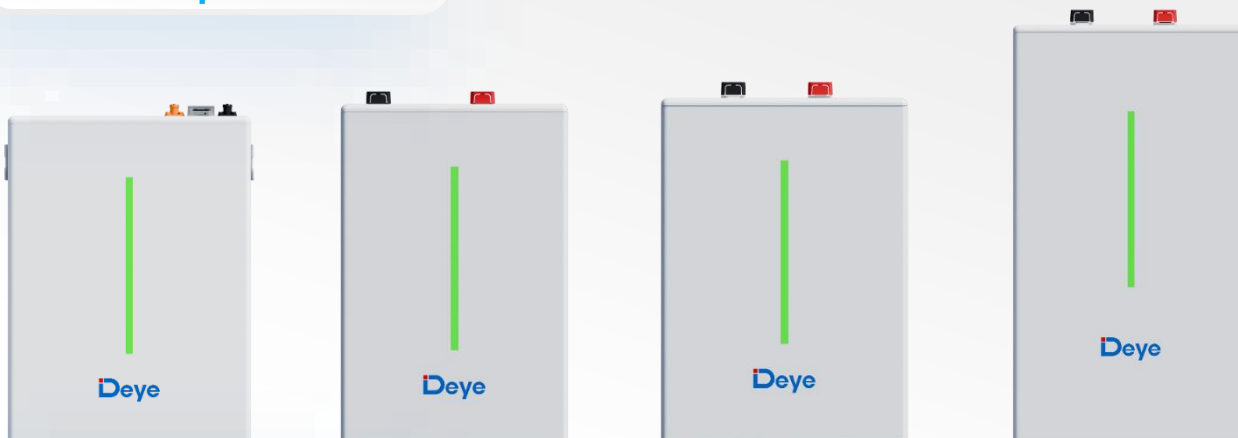


Multiple Appearance Options



SE-F5 Pro/Plus SE-F5 /F12/F16

LED strip version



Display screen version



**THE WHOLE SERIES
ADDS A POSITIVE
INTERACTIVE
VERSION FOR
CUSTOMIZATION**

**Standard white paint
home appliance white,
simple and bright**

If there are OEM/ODM color or other custom paint requirements, please consult the product department



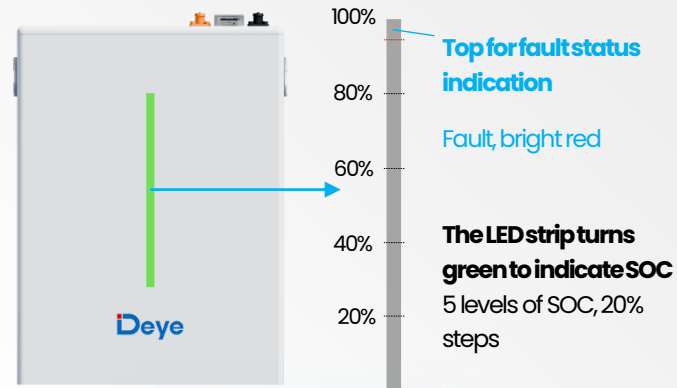
Multiple Appearance Options

Positive interaction style selection | SE-F5 Pro/Plus SE-F5 /F12/F16



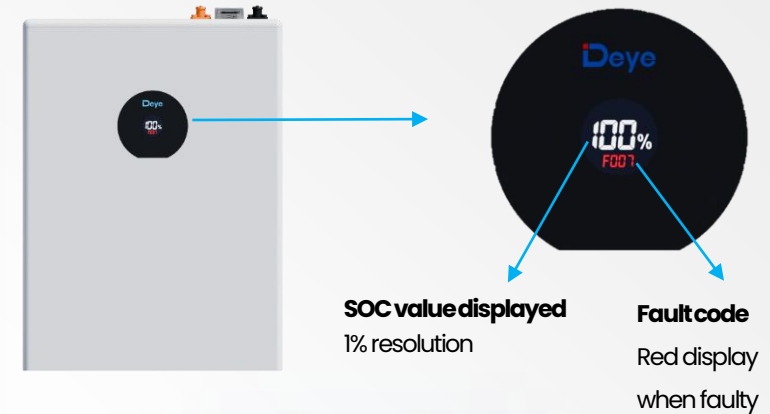
Minimalist

No interaction design on the front
Suitable for stacked installation



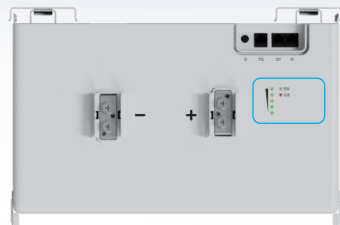
Intuitive

LED strip interaction design on the front, SOC and fault status are more intuitive
More suitable for floor or wall mounting



Precise

Display screen interaction design on the front, View SOC and fault codes in detail, making operations more efficient
More suitable for floor or wall mounting



All model

The connection panel has LED light interaction

SOC*5pcs+ALM*1pcs+RUN*1pcs



Multiple Appearance Options

Bottom wheel version

BOTTOM
WHEEL

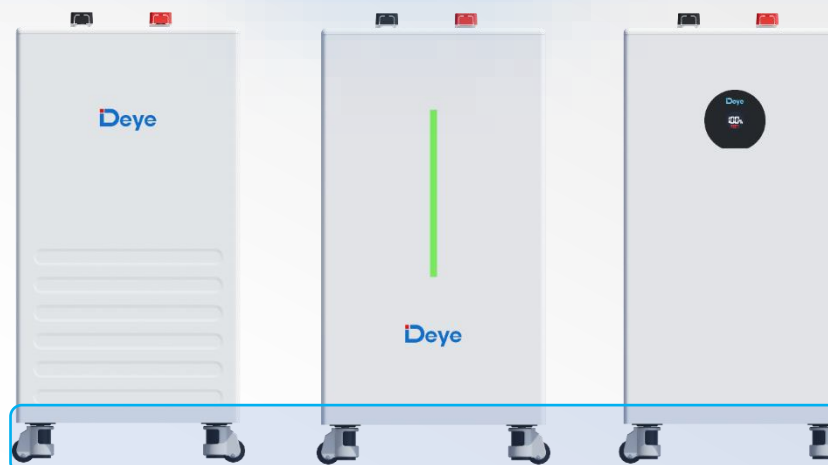
(Optional)
4PCS

Suitable for floor installation,
can be easily moved by one person

SE-F12



SE-F16



Model Selection



Config version details SE-F5&SE-F5 Plus

Product Model	Config Version	Deye PLM/U9	Description	Illustration
SE-F5 SE-F5 Plus	L	SE-F5-L	White housing Standard logo	
		SE-F5 Plus-L		
	E	SE-F5-E	White housing LED strip(green)	
		SE-F5 Plus-E		
	C	SE-F5-C	White housing Display screen	
		SE-F5 Plus-C		

Product nameplate config version frame selection recognition

SE-F5 Plus

Config Version: ☐ L ☐ E ☐ C

Nominal Capacity:	100Ah	IFP52/161/120/16SJM/-20+50/90
Nominal Energy:	5.12kWh	Ingress Protection: IP21
Nominal Voltage:	51.2Vdc	Operating Temperature(Charge): -10~55°C
Max. Charge/Discharge Current:	100/120A	Operating Temperature(Discharge): -20~55°C
Operating Voltage Range:	44.8~57.6Vdc	Storage Temperature: 0~35°C

Rechargeable Li-Ion Battery System

SN

NINGBO DEYE ESS TECHNOLOGY CO.,LTD.

MADE IN CHINA

Add.No.568, South Rixian Road, Binhai Economic Development Zone, Cixi, Ningbo, Zhejiang, P. R. China

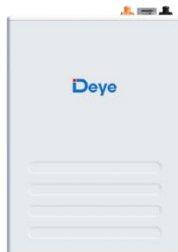
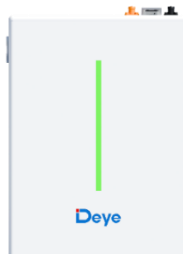
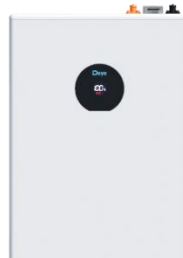
Product packaging label config version frame selection recognition

Config Version:	☐ L ☐ E ☐ C
Order:	XXXXXXXXXXXXXXXX
Product ID:	XXXXXXXXXXXXXXXX
Manufacture Date:	XXXX-XX-XX
S/N:	

Model Selection



Config version details SE-F5 Pro

Product Model	Config Version	Deye PLM/U9	Description	Illustration
SE-F5 Pro	L	SE-F5 Pro-L	White housing Standard logo	
	E	SE-F5 Pro-E	White housing LED strip(green)	
	C	SE-F5 Pro-C	White housing Display screen	

Model Selection



Config version details SE-F12 & SE-F16

Product Model	Config Version	Deye PLM/U9	Description	Illustration
SE-F12 SE-F16	L	SE-F12-L	White housing Standard logo	
		SE-F16-L	Optional Bottom wheels	
	E	SE-F12-E	White housing LED strip(green)	
		SE-F16-E	Optional Bottom wheels	
	C	SE-F12-C	White housing Display screen	
		SE-F16-C	Optional Bottom wheels	



Design Comparison



Full series supports multiple installation methods for convenient and quick use



Wall-Mounted



SE-F5 Pro

SE-F5/F5 Plus

SE-F12

SE-F16

Floor-Mounted, Stack-Mounted

- Stackable up to 6 layers (4 layers for SE-F16)
- Multiple stacks can continue to be connected in parallel



*2pcs

For SE-F5 Plus
SE-F5 Pro
SE-F5



*1pcs

For SE-F12
SE-F16



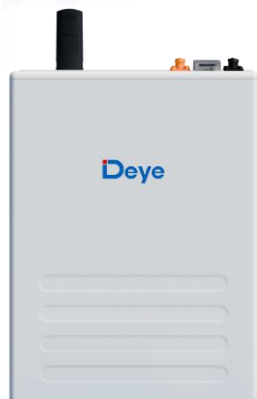
*4pcs

✓ Standard Configuration : Wall-mounted
Installation Hooks

✓ Standard Configuration: Stackable
Installation Bracket

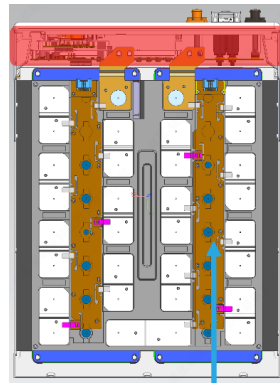
✓ Standard Configuration: Connection Cables:
Positive/Negative Power Wire_1 meter, Communication Wire_1 meter, Grounding
Wire_1 meter

Design Comparison SE-F5 Pro & SE-F5/F5 Plus



SE-F5 Pro

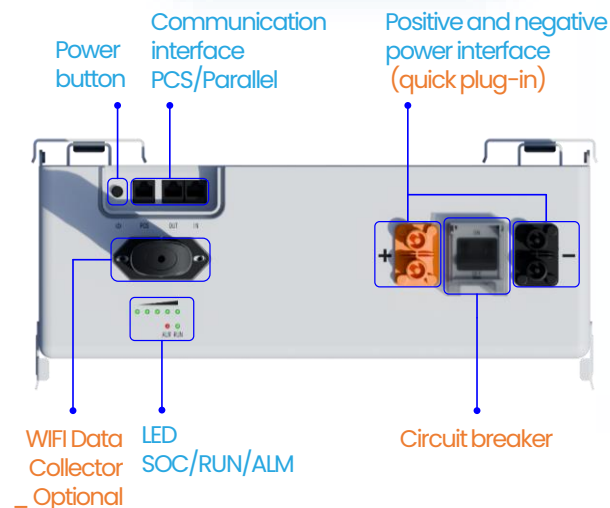
1P16S 100Ah_Longcycle-F5



High-stability MOS
version BMS

All-model integrated CCS:
Stable and reliable, improving production efficiency

Wall-mounted top view



SE-F5 Pro: Global

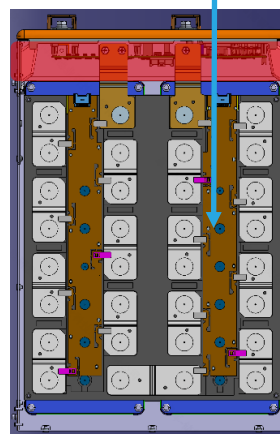
- Supports optional Wi-Fi remote control function
- Covers circuit breaker protection and quick-connect wiring



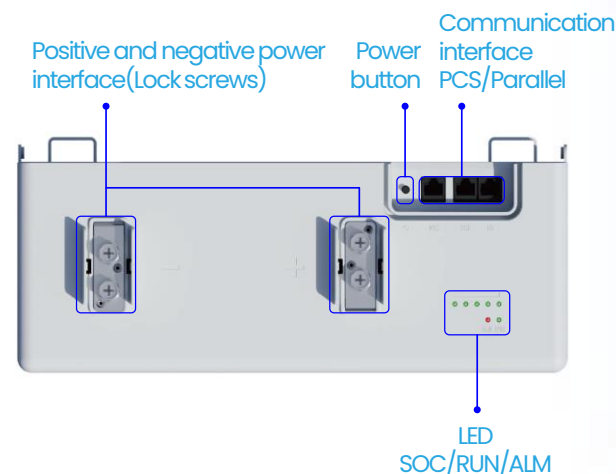
SE-F5/F5 Plus

1P16S 100Ah_ Short cycle-F5

_ Low-temperature+Long cycle-F5 Plus



Low-loss GaN
version BMS



SE-F5: EU, AS, AF, LATAM

SE-F5 Plus: EU, AS, AF, LATAM

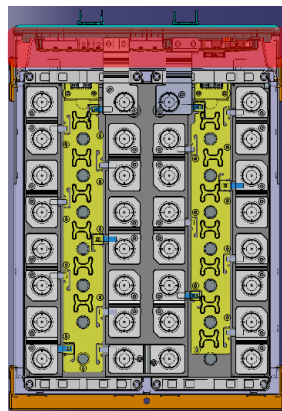
- Supports charging in extreme cold environments down to -10°C (F5 Plus)
- 1C charge / 1.2C discharge



Design Comparison SE-F12 & SE-F16



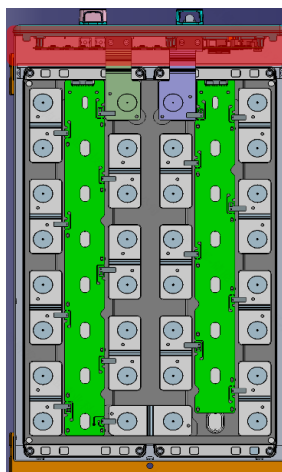
SE-F12



1P16S 230Ah
High-stability MOS version BMS



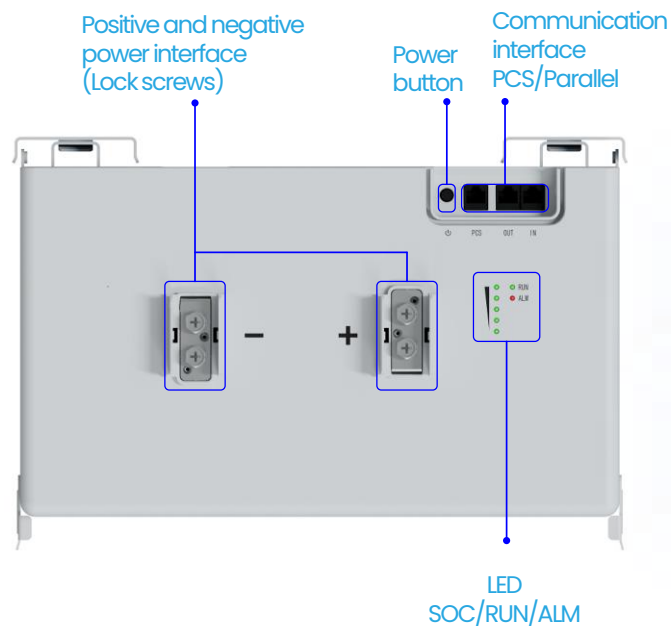
SE-F16



1P16S 314Ah
High-stability MOS version BMS



Wall-mounted top view

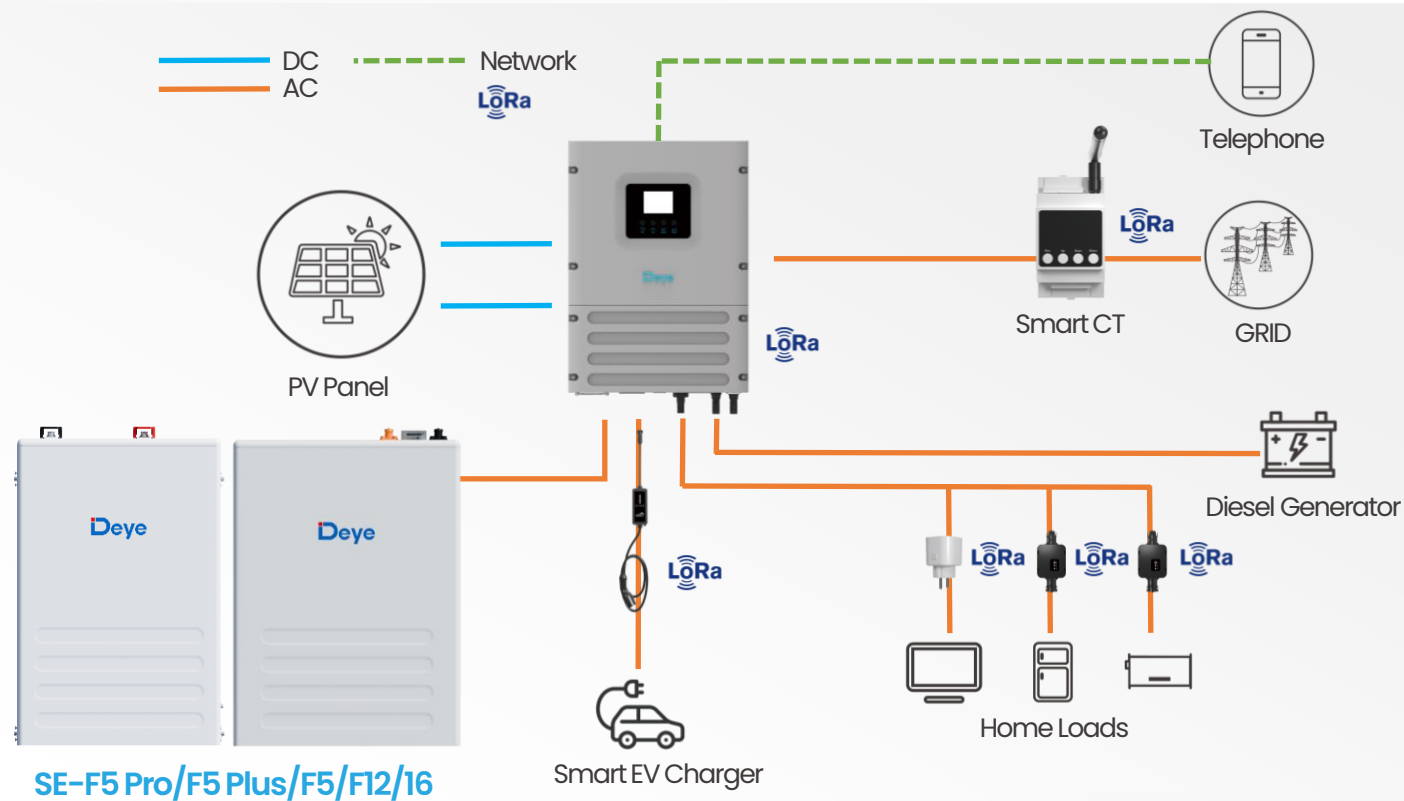


All-models injection-molded panels:
mold-formed for reduced weight

SE-F12: EU, AS, AF, LATAM

SE-F16: EU, AS, AF, LATAM

Typical Application



Connect the Deye hybrid inverter to the grid, and pair it with smart CTs, smart plugs, smart switches, etc., to form a complete Deye smart management system, ensuring stable and efficient home electricity use.



Exceptional Compatibility



SE-F5 Pro/Plus SE-F5 /F12/F16



Support all series low-voltage energy storage inverters of **Deye**



Can fully match mainstream third-party inverter brands



Battery Pairing Recommendation

Off Grid



Battery pairing recommendation				
matching inverter	SE-F5 Pro	SE-F5/F5 Plus	SE-F12	SE-F16
3.6k	≥1pcs	≥1pcs	≥1pcs	≥1pcs
5k	≥1pcs	≥1pcs	≥1pcs	≥1pcs
6k	≥2pcs	≥1pcs	≥1pcs	≥1pcs

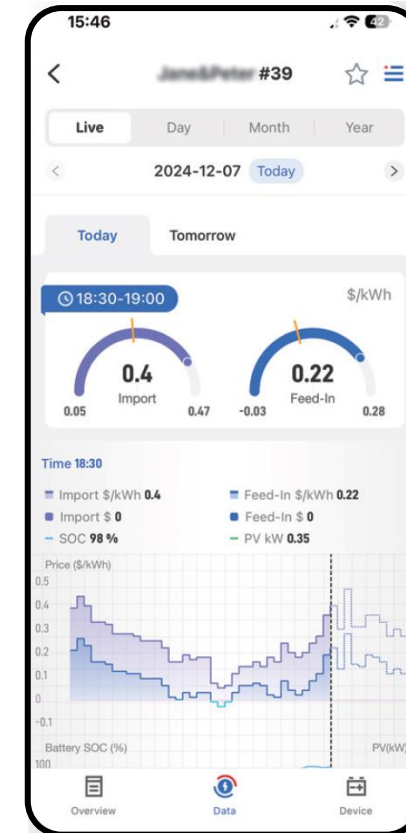
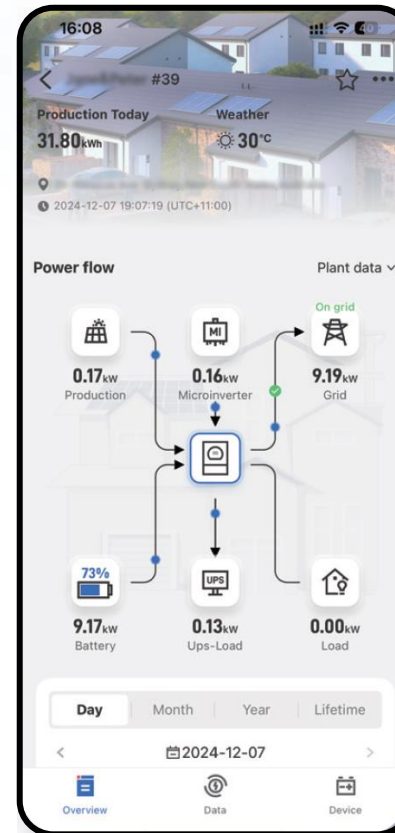
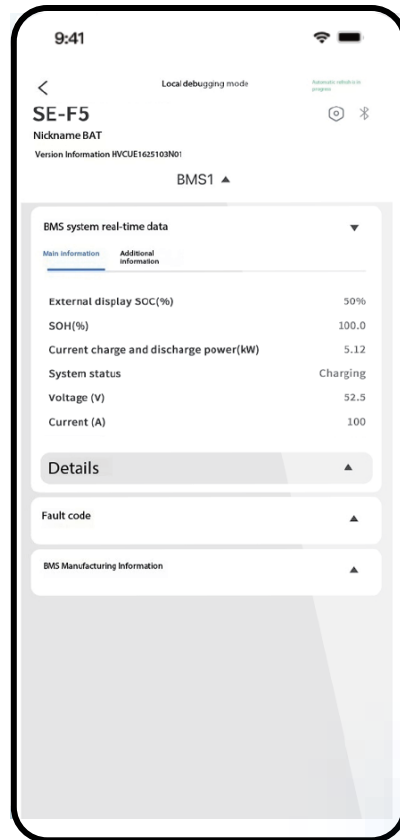
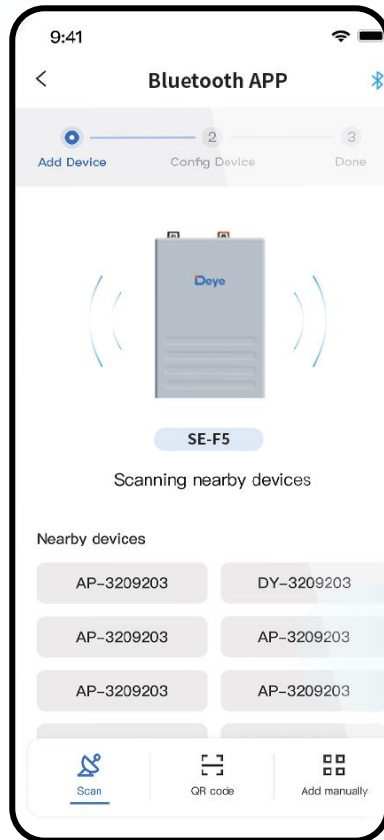
On/Off Grid



Battery pairing recommendation				
matching inverter	SE-F5 Pro	SE-F5/F5 Plus	SE-F12	SE-F16
3~5k	≥1pcs	≥1pcs	≥1pcs	≥1pcs
6k	≥2pcs	≥1pcs	≥1pcs	≥1pcs
7~10k	≥2pcs	≥2pcs	≥1pcs	≥1pcs
12k	≥3pcs	≥2pcs	≥1pcs	≥2pcs
14~15k	≥3pcs	≥3pcs	≥2pcs	≥2pcs
16~20k	≥4pcs	≥3pcs	≥2pcs	≥2pcs



Smart Control at Your Fingertips



Local Monitoring Mode (Battery) Bluetooth & standard on all models

- ✓ Low power Bluetooth
- ✓ Quick pairing
- ✓ Automatic upgrades
- ✓ No internet required

Remote Monitoring Mode (Battery & Inverter) WIFI & F5 Pro optional or inverter networking

- ✓ Real-time device monitoring
- ✓ Intelligent charging and discharging strategies
- ✓ AI data analysis
- ✓ Customized O&M



Sea Transport Packing Solutions



Model	Size per box mm	Weight per box kg	Stacking method	Single stack size mm	Single stack total weight(kg)	40GP Container		40HQ Container	
						Tray No.	Pack No.	Tray No.	Pack No.
SE-F5 SE-F5 Plus	660*473*242	Net : 41 Gross : 46	4*4	1370*1090*1118	766	32	512	/	/
SE-F5 Pro	670*526*242	Net : 44 Gross : 49	4*4	1370*1090*1118	814	31	496	/	/
SE-F12	714*555*354	Net : 84 Gross : 95	2*3	1160*775*1212	600	/	/	45	252
SE-F16	879*571*354	Net : 109 Gross : 203	1*3	950*670*1212	390	/	/	66	198



Thank You!

SE-F5 Pro/F5 Plus/F5/F12/16
Product Introduction

June, 2025

