



More Reliable More Practical More Affordable

Off-Grid ESS Solution



SUN-3/3.6/5/6K-OG02LP1-EU-AM1

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



2× PV Oversizing
Higher Energy Yield



36A PV Input
2 strings



200% Peak Output
Reliable High-Power Startup



135A Charge/Discharge Current
Proven Reliability



4ms Ultra-Fast Switching
Seamless Power for Sensitive Loads



97.6% Conversion Efficiency
Low Charge/Discharge Losses



Scalable System
Inverter and Battery Expandable in Parallel



Speed up returns
Greater Affordability Boosts ROI



Smart Energy Management
PV prioritized, surplus stored



Flexible Installation
Battery supports floor-mounted, wall-mounted, or modular stacking



Safe & Reliable
Advanced BMS + Active Fuse Protection



Smart Connectivity
Remote Monitoring & Configuration



Inverter

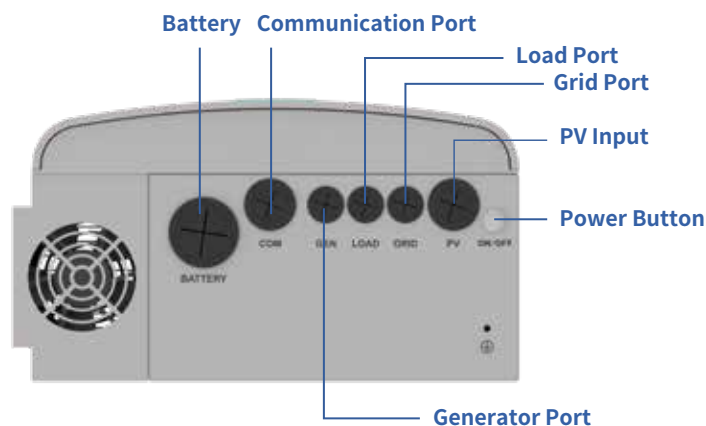
SUN-3/3.6/5/6K-OG02LP1-EU



Deye OG Series Off-Grid Inverters

Multiple power options: 3 / 3.6 / 5 / 6 kW

SUN-3/3.6/5/6K-OG02LP1-EU



Battery

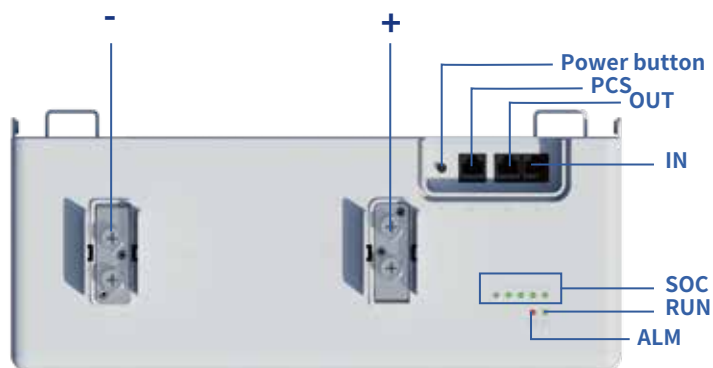
SE-F5 & SE-F5 Plus & SE-F12 & SE-F16



Deye SE Series High-Performance Energy Storage Batteries

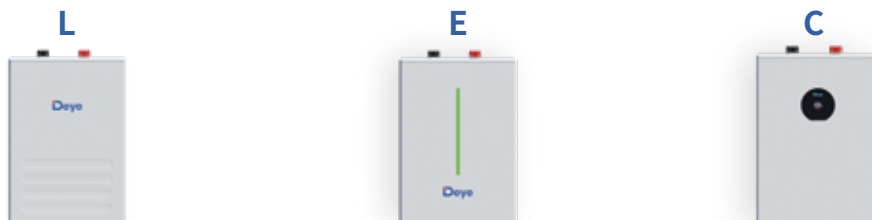
Multiple capacity options: 5 / 12 / 16 kWh

SE-F5 SE-F5 Plus SE-F12 SE-F16



SE-F Series Model Selection & Appearance Reference

SE-F5/F5 Plus/F12/F16



Mounting Example

Stack-Mounted

SE-F5/F5 Plus/F12 support up to 6 packs per cluster (4 packs for SE-F16), allowing parallel connection of multiple clusters

Wall-Mounted

All models support wall-mounted installation, allowing parallel connection of multiple clusters

Wheel-Mounted

Available for SE-F12 & SE-F16





Model	SUN-3K-OG02LP1 -24-EU-AM1	SUN-3K-OG02LP1 -EU-AM1	SUN-3.6K-OG02LP1 -EU-AM1	SUN-5K-OG02LP1 -EU-AM1	SUN-6K-OG02LP1 -EU-AM1
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	20-30	40-60			
Max. Charging Current (A)	130	70	90	120	135
Max. Discharging Current (A)	130	70	90	120	135
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	1				
PV String Input Data					
Max. PV Access Power (W)	6000		7200	10000	12000
Max. PV Input Power (W)	4800		5760	8000	9600
Max. PV Input Voltage (V)	450				
Start-up Voltage (V)	125				
MPPT Voltage Range (V)	150-425				
Rated PV Input Voltage (V)	370				
Max. Operating PV Input Current (A)	36				
Max. Input Short-Circuit Current (A)	54				
AC Output Data					
Rated AC Output Power (VA/W)	3000		3600	5000	6000
Max. AC Output Power (VA/W)	3000		3600	5000	6000
Max. AC Output Current (A)	13.1		15.7	21.8	26.1
Peak Power (W)	2 times of rated power, 10s				
Rated Output Voltage (V)	230				
Output Type	L+N+PE				
Rated Output Frequency (Hz)	50/60				
Output Voltage Waveform	Pure Sine Wave				
Total Current Harmonic Distortion THDi	<3%				
AC Input Data (Grid and Generator)					
Max. Input Power to Battery (W)	3000		3600	5000	6000
Rated Input Voltage/Range (V)	230				
Rated Input Frequency (Hz)	50/60				
Grid Input Current (A)	35				
Generator Input Current (A)	35				
Efficiency					
Max. Efficiency	97.6%				
Euro Efficiency	96.5%				
MPPT Efficiency	>99%				
Equipment Protection					
Integrated	DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc fault circuit interrupter (AFCI) (Optional), Insulation Impedance Detection				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
LCD/LED display	LCD				
Communication Interface	WIFI,RS485,CAN				
General Data					
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating				
Permissible Ambient Humidity	0-100%				
Permissible Altitude	3000m				
Noise (dB)	<46				
Ingress Protection(IP) Rating	IP 65				
Inverter Topology	Non-Isolated				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet Size (WxHxD mm)	306×427.5×175.8 (Excluding Connectors and Brackets)				
Weight (kg)	9.3				
Type of Cooling	Intelligent Air Cooling				
Warranty	Standard 5 years, extended warranty				
Safety / EMC Standard	IEC62109-1/-2, EN61000-6-1,EN61000-6-2,EN61000-6-3,EN61000-6-4				

SE-F Series



Model		SE-F5	SE-F5 Plus	SE-F12	SE-F16
Main Parameters					
Battery Chemistry		LiFePO ₄			
Capacity		100 Ah		230 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		5.12 kWh		11.8 kWh	16 kWh
Charge Current ^[2]	Max. Continuous	100 A		230 A	160 A
	Peak	120 A (10 sec)		280 A (10 sec)	
Discharge Current ^[2]	Max. Continuous	120 A		230 A	
	Peak	150 A (10 sec)		280 A (10 sec)	
Other Parameter					
Recommend Depth of Discharge		80% DoD		90% DoD	
Dimension (W × H × D) (Without hanging board)		370 × 548 × 140 mm		400 × 559 × 233 mm	400 × 708 × 233 mm
Weight Approximate		41 kg		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	Charge: -10~55°C / Discharge: -20~55°C	Charge: 0~55°C / Discharge: -20~55°C	
Storage Temperature		0~35°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	5 years / 10 years (extended warranty)	
Energy Throughput ^[3]		8 MWh	16 MWh	18 MWh	25 MWh
Certification		UN38.3, MSDS, CE, CB			

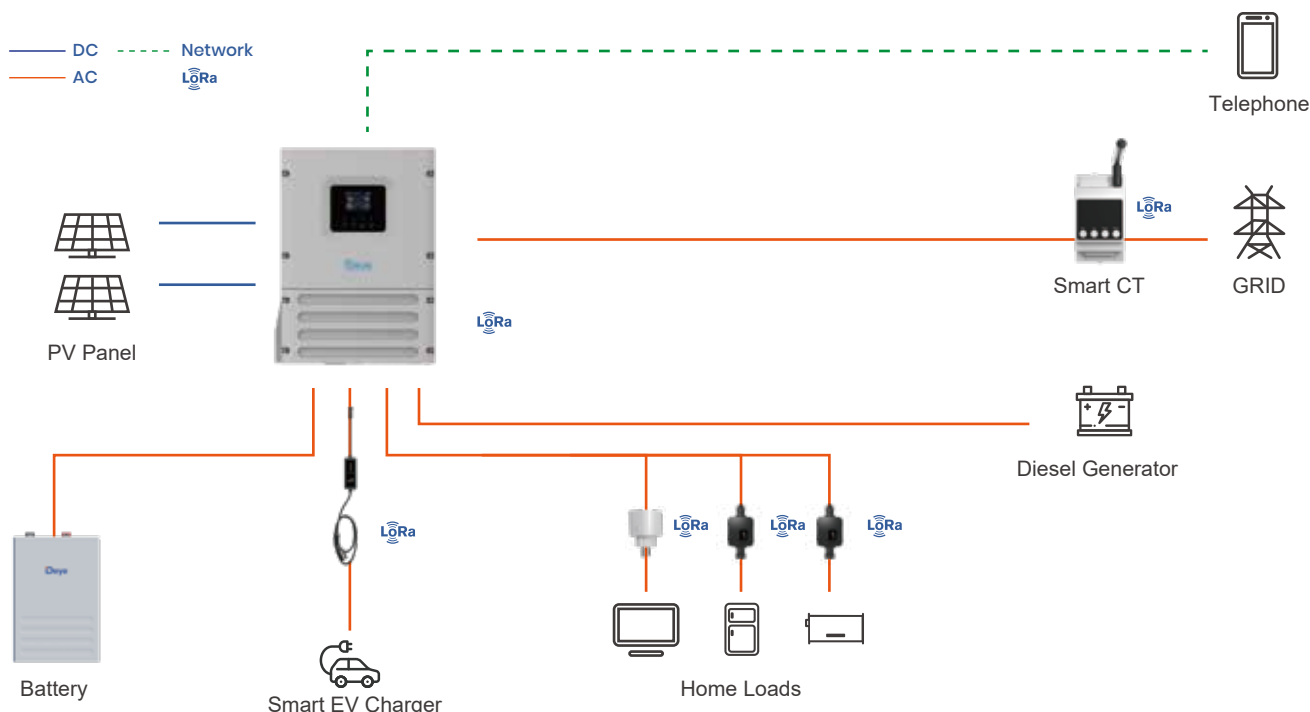
[1] Max. 64 pcs can parallel with CAN-Box.

[2] Operating current is affected by temperature and SOC. This max. continuous current is only supported in lithium battery mode; for lead-acid mode, please refer to the manual for the max. continuous current.

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

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

