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OFF-GRID NEW ESS SOLUTION

SUN-3/3.6/5/6K-OG01LP1-EU-AM2
SE-F5 / SE-F12 / RW-G10.6 / RW-F16 / SE-G5.1 / SE-G10.2

SINGLE PHASE OFF-GRID INVERTER

SUN-3K-OG01LP1-24-EU-AM2
 SUN-3.6K-OG01LP1-EU-AM2
 SUN-5K-OG01LP1-EU-AM2
 SUN-6K-OG01LP1-EU-AM2

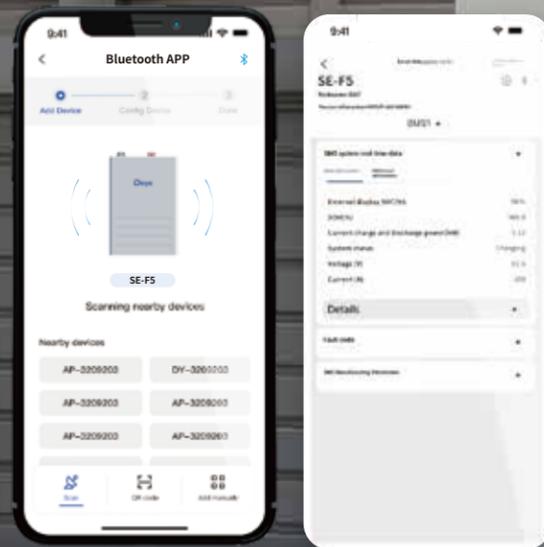


- High Performance**
 Support a peak output of 2 times the rated power for up to 10 seconds
- Outdoor-Ready**
 IP65-rated, built to withstand tough environments
- Durable & Reliable**
 Independent cooling design reduces dust accumulation and extends lifespan
- Parallel Scalability**
 Supports 16 pcs parallel (off-grid)
- Generator Integration**
 Support storing energy from diesel generator
- High Efficiency**
 4ms UPS-level switching time
 Max. efficiency of 97.6% for optimal performance
- Smart MPPT Technology**
 2 MPPTs, supports 1.6x PV oversizing (18A+18A), optimizing energy from panels at various angles
- Long-Term Assurance**
 5-year warranty, extendable to 10 years for peace of mind

Model	SUN-3K-OG01LP1-24-EU-AM2	SUN-3.6K-OG01LP1-EU-AM2	SUN-5K-OG01LP1-EU-AM2	SUN-6K-OG01LP1-EU-AM2
Battery Input Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	20-30	40-60		
Max. Charging Current (A)	130	90	120	135
Max. Discharging Current (A)	130	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)	500			
Start-up Voltage (V)	125			
PV Input Voltage(V)	125-500			
MPPT Voltage Range(V)	150-425			
Full Load MPPT Voltage Range(V)	300-425			
Rated PV Input Voltage (V)	370			
Max. Operating PV Input Current (A)	18	18+18		
Max. Input Short-Circuit Current (A)	27	27+27		
No. of MPP Trackers/No. of Strings MPP Tracker	1/1	2/1+1		
Max. Inverter Backfeed Current to The Array(A)	0			
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	50Hz / 60Hz			
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 (V)	230			
Rated Input Frequency	50Hz / 60Hz			
Grid Input Current (A)	35			
Generator Input Current (A)	35			
Efficiency				
Max. Efficiency	97.60%			
Euro Efficiency	96.50%			
MPPT Efficiency	>99%			
Equipment Protection				
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level			
Surge Protection Level	TYPE II(DC), TYPE II(AC)			
Interface				
LCD/LED Display	LCD			
Communication Interface	WIFI/RS485/CAN/Bluetooth			
General Data				
Max. Operating Frequency(Hz)	200M			
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating			
Permissible Ambient Humidity	0-100%			
Permissible Altitude	3000m			
Noise (dB)	<55			
Ingress Protection(IP) Rating	IP 65			
Inverter Topology	Non-Isolated			
Over Voltage Category	OVC II(DC), OVC III(AC)			
Cabinet Size (WxHxD mm)	306×427.5×175.77 (Excluding Connectors and Brackets)			
Weight (kg)	12.65			
Type of Cooling	Intelligent Air Cooling			
Warranty	Standard 5 years, extended warranty			
Safety / EMC Standard	IEC62109-1/2, EN61000-6-6, EN61000-6-3, EN61000-6-4			

OFF-GRID ESS SOLUTION COMBINATION 1

SUN-3.6/5/6K-OG01LP1-EU-AM2
SE-F5/SE-F12



Comprehensive Protection

- Advanced BMS with active fuse

Optimized Energy Density

- Integrated PACK: reduced line loss, enhanced energy density

Easy Maintenance

- Auto-networking, Deye Cloud & Bluetooth APP remote/local control

Superior Performance

- Supports Max. 1.2C (6kW or 12kW) discharge, GaN MOSFETs: 50% loss reduction, high-temp resistance

Flexible Expansion

- Max. 32 units in parallel

Reliable Durability

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

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Model	SE-F5	SE-F12
Main Parameters		
Battery Chemistry	LiFePO ₄	
Capacity ⁽¹⁾	100 Ah	230 Ah
Scalability	Max. 32 pcs in parallel	
Nominal Voltage	51.2 V	
Operating Voltage	44.8 V ~ 57.6 V	
Nominal Energy ⁽¹⁾	5.12 kWh	11.8 kWh
Charge Current ⁽²⁾	Max. Continuous	50 A
	Peak	75 A (10 sec)
Discharge Current ⁽²⁾	Max. Continuous	120 A
	Peak	150 A (10 sec)
Other Parameter		
Recommend Depth of Discharge	80% DoD	
Dimension (W × H × D)	370 × 548 × 140 mm (Without hanging board)	400 × 583 × 232 mm (Without hanging board)
Weight Approximate	41 kg	82 kg
LED Indicator	LED (SOC, working, protecting) & Buzzer	
IP Rating of Enclosure	IP21	
Operating Temperature	Charge: 0~55°C / Discharge: -20°C~55°C	
Storage Temperature	0~35°C	
Relative Humidity	95% (non-condensing)	
Altitude	≤3000m	
Cycle Life	≥6000(25°C±2°C,80%DOD,70%EOL)	
Installation	Wall-Mounted, Stack-Mounted	
Communication	CAN2.0, RS485, Bluetooth, APP	
Warranty Period ⁽³⁾	5 years	
Energy Throughput ⁽³⁾	8 MWh	18 MWh
Certification	UN38.3, MSDS	
Product Expansion		
Battery backup time		
SUN-3.6K-OG01LP1-EU-AM2	1h 2h 3h 4h	2h 3h 4h
SUN-5K-OG01LP1-EU-AM2	1 unit 2 units 3 units 4 units	1 unit 2 units 2 units
SUN-6K-OG01LP1-EU-AM2	1 unit 2 units 3 units 4 units	1 unit 2 units 2 units

[1] Test conditions : 25°C±2°C, at beginning of life and calibration mode, 0.2C charge & 0.2C discharge, 100% DOD.

[2] The current is affected by temperature and SOC.

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

OFF-GRID ESS SOLUTION COMBINATION 2

SUN-3.6/5/6K-OG01LP1-EU-AM2
RW-G10.6

RW-G10.6

Deye

Easy Operation & Maintenance

- Automatic networking for battery modules (No DIP switches)
- Support remotely monitor and upgrade the firmware via Deye inverter
- Support external power supply activation, prevents battery suspension
- Allow over-discharge direct recharge, easy to maintain

Flexible Application

- Support Max.32 units in parallel
- Built-in 10A constant-current limit charge
- Compatible with any brand inverter charge and discharge
- Suitable for providing energy for backup power (residential use)

Safer

- LFP Battery: safe, long-lasting, high-efficiency
- Eco-friendly materials, non-toxic, pollution-free module

Reliable

- Built-in circuit breaker, support 100A charge and 100A discharge
- Charge from 0°C to 55°C, discharge from -20°C to 55°C



Main Parameter		RW-G10.6		
Battery Chemistry		LiFePO ₄		
Built-in Circuit Breaker		125A 1P, 60Vdc		
Capacity (Ah)		208		
Scalability		Max. 32 pcs pack (Max.340kWh) in parallel		
Nominal Voltage (V)		51.2		
Operating Voltage (V)		44.8 ~ 57.6		
Nominal Energy (kWh)		10.64		
Usable Energy (kWh) ^[1]		9.58		
Charge / Discharge Current (A) ^[2]	Max. Continuous	100 / 100		
	Peak	200 / 200 (10 sec)		
Other Parameter		RW-G10.6		
Recommend Depth of Discharge		90%		
Dimension (W × H × D, mm)		600 × 750 × 200 (Without hanging board)		
Weight Approximate (kg)		96kg		
Master LED Indicator		LED (SOC : 20% ~ SOC100% and working state)		
IP Rating of Enclosure		IP20		
Operating Temperature		Charge : 0 ~ 55°C / Discharge : -20°C ~ 55°C		
Recommend Operating Temperature		15°C ~ 35°C		
Storage Temperature		0°C ~ 35°C		
Relative Humidity		95% non-condensing		
Altitude		≤2000m		
Cycle Life		≥6000 (25°C±2°C, 90%DOD, 70%EOL)		
Installation		Wall-Mounted, Floor-Mounted		
Communication Port		CAN2.0, RS485		
Warranty Period ^[3]		5 years		
Energy Throughput		16MWh (25°C, 0.5C / 0.5C, 70%EOL)		
Certification		UN38.3, MSDS		
Product Expansion		RW-G10.6		
Battery backup time		2h	3h	4h
SUN-3.6K-OG01LP1-EU-AM2		-	2 units	2 units
SUN-5K-OG01LP1-EU-AM2		1 unit	2 units	2 units
SUN-6K-OG01LP1-EU-AM2		1 unit	2 units	3 units

[1] Test conditions : 25°C±2°C, at beginning of life, 0.3C charge & 0.3C discharge,100% DOD.

[2] The current is affected by temperature and SOC.

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

OFF-GRID ESS SOLUTION COMBINATION 3

SUN-3.6/5/6K-OG01LP1-EU-AM2
RW-F16



Easy Operation & Maintenance

- Battery module auto networking (No DIP switches)
- Support remotely monitoring and upgrade the firmware via Deye inverter
- Support external power supply activation, prevents battery suspension
- Allow over-discharge direct recharge, easy to maintain.

Safer

- LFP Battery : Safe, long-lasting, high-efficiency, Built-in circuit breaker, Intelligent BMS. Eco-friendly materials, non-toxic, pollution-free module.

Flexible Application

- Support Max. 32 units in parallel
- Built-in 10A constant-current limit charge
- Compatible with any brand inverter charge and discharge
- Suited to provide energy for backup power, residential, etc.

Reliable

- Support 160A charge and 160A discharge
- Charge from 0°C to 55°C, discharge from -20°C to 55°C



Main Parameter		RW-F16		
Battery Chemistry		LiFePO ₄		
Built-in Circuit Breaker		125A 2P, 60Vdc		
Capacity (Ah) ^[1]		314		
Scalability		Max. 32 pcs pack (Max.512kWh) in parallel		
Nominal Voltage (V)		51.2		
Operating Voltage (V)		44.8 ~ 57.6		
Nominal Energy (kWh) ^[2]		16		
Usable Energy (kWh@90%DOD)		14.4		
Charge / Discharge Current (A) ^[2]	Max. Continuous	160 / 160		
	Peak	300 / 300 (10 sec)		
Other Parameter		RW-F16		
Recommend Depth of Discharge		90%		
Dimension (W × H × D, mm)		480 × 830 × 230 (Without hanging board)		
Weight Approximate (kg)		120		
Master LED Indicator		LED (SOC and working state)		
IP Rating of Enclosure		IP20		
Operating Temperature		Charge : 0 ~ 55°C / Discharge : -20°C ~ 55°C		
Recommend Operating Temperature		15°C ~ 35°C		
Storage Temperature		0°C ~ 35°C		
Relative Humidity		0.95		
Altitude		≤2000m		
Cycle Life		≥6000 (25°C±2°C, 90%DOD, 70%EOL)		
Installation		Wall-Mounted, Floor-Mounted		
Communication Port		CAN2.0, RS485		
Warranty Period ^[3]		5 years		
Energy Throughput ^[3]		52.5MWh (25°C, 0.5C / 0.5C, 70%EOL)		
Certification		UN38.3, MSDS		
Product Expansion		RW-F16		
Battery backup time		2h	3h	4h
SUN-3.6K-OG01LP1-EU-AM2		-	-	1 unit
SUN-5K-OG01LP1-EU-AM2		-	1 unit	2 units
SUN-6K-OG01LP1-EU-AM2		1 unit	2 units	2 units

[1] Test conditions : 25°C±2°C, at beginning of life, 0.5C charge & 0.5C discharge, 100% DOD.

[2] The current is affected by temperature and SOC.

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

OFF-GRID ESS SOLUTION COMBINATION 4

SUN-3.6/5/6K-OG01LP1-EU-AM2
SE-G5.1/SE-G10.2



Safer

- LFP Battery : safety, long lifespan and high-energy density
- Built-in intelligent BMS, providing complete protection

Enhanced Reliability

- 5 years warranty
- Wide temperature range: -20°C ~ 55°C

More Flexible

- Easy to expand, Max. 64 units in parallel (327kWh/655kWh)
- Suitable for residential and commercial use

Exceptional Performance

- Support Max. 0.5C continuous charging and discharging
- Support external power supply activation, prevents battery suspension
- Allow over-discharge direct recharge

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Model	SE-G5.1	SE-G10.2	
Battery Chemistry	LiFePO ₄		
Nominal Capacity ^[1]	100 Ah	200 Ah	
Nominal Voltage	51.2V		
Operating Voltage	44.8V ~ 57.6V		
Nominal Energy ^[1]	5.12 kWh	10.24 kWh	
Cell Configuration	1P16S	2P16S	
Scalability ^[4]	Max. 64 pcs pack (327kWh) in parallel	Max. 64 pcs pack (655kWh) in parallel	
Charge Current ^[2]	Max. Continuous 50 A	100 A	
	Peak 100 A (10 sec)	200 A (10 sec)	
Discharge Current ^[2]	Max. Continuous 50 A	100 A	
	Peak 100 A (10 sec)	200 A (10 sec)	
Other Parameter			
Recommend Depth of Discharge	80% DoD		
Dimension (W × D × H, mm)	440 × 540 × 133	710 × 540 × 133	
Weight Approximate	44 kg	85 kg	
Master LED Indicator	5LED (SOC : 20% ~ SOC100%) , 3LED (working, alarming, protecting)		
Communication Port	CAN2.0, RS485		
IP Rating of Enclosure	IP20		
Operating Temperature	Charge : 0 ~ 55°C, Discharge : -20°C ~ 55°C		
Storage Temperature	0 ~ 35°C		
Relative Humidity	95%		
Altitude	≤2000 m		
Cycle Life	≥6000 (25°C±2°C, 80%DOD, 70%EOL)		
Warranty Period ^[3]	5 years		
Installation	Wall-Mounted, Floor-Mounted (Stacked) , Rack-Mounted (cabinet depth ≥600mm)		
Certification	UN38.3,MSDS		
Product Expansion			
Battery backup time	2h	3h	4h
SUN-3.6K-OG01LP1-EU-AM2	2 units	2 units	3 units
SUN-5K-OG01LP1-EU-AM2	2 units	3 units	4 units
SUN-6K-OG01LP1-EU-AM2	3 units	4 units	5 units
Product Expansion			
Battery backup time	2h	3h	4h
SUN-3.6K-OG01LP1-EU-AM2	-	1 unit	2 units
SUN-5K-OG01LP1-EU-AM2	1 unit	2 units	2 units
SUN-6K-OG01LP1-EU-AM2	2 units	2 units	3 units

[1] Test conditions : 25°C±2°C, at beginning of life, 0.2C charge & 0.2C discharge,100% DOD.

[2] The current is affected by temperature and SOC.

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

[4] Max. 32 pcs without external CAN-Box.

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**

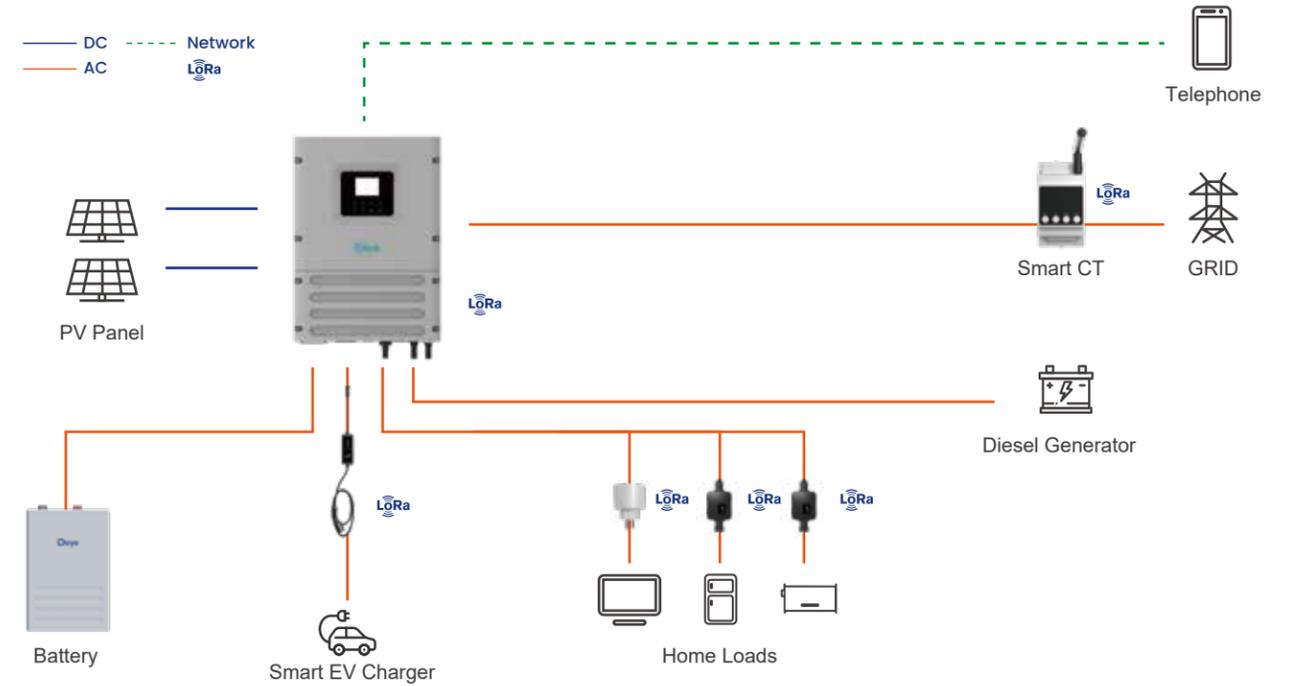
Smarten Up Your Home Energy

Download Deye APP to join us!
Embrace a seamless, effortless energy experience that's both ecofriendly and budget-friendly with our intelligent assistant



Deye Smart Energy Management System

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.

