Off-Grid Inverter

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



2× PV Oversizing
Higher Energy Yield

36A PV Input
Maximize solar power harvest

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

Technical Data

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)	18			36	
Max. Input Short-Circuit Current (A)	27			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, 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 (℃)	-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 (solar), Isolated (battery)				
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				



