



# 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

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
<b>Battery Input Data</b>					
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				
<b>PV String Input Data</b>					
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	
<b>AC Output Data</b>					
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%				
<b>AC Input Data (Grid and Generator)</b>					
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				
<b>Efficiency</b>					
Max. Efficiency	97.6%				
Euro Efficiency	96.5%				
MPPT Efficiency	>99%				
<b>Equipment Protection</b>					
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)				
<b>Interface</b>					
LCD/LED display	LCD				
Communication Interface	WIFI,RS485,CAN				
<b>General Data</b>					
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 (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				