

# Single Phase Hybrid Inverter

SUN-7.6/8K-SG02LP1-EU-AM2-P  
SUN-10/12K-SG02LP1-EU-AM3-P



## Intuitive

- Colorful touch LCD, IP65 protection degree



## Intelligent

- 6 time periods for battery charging/discharging



## Flexible

- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; support multiple batteries parallel



## Reliable

- Max. charging/discharging current of 250A
- Support storing energy from diesel generator

Model	SUN-7.6K-SG02 LP1-EU-AM2-P	SUN-8K-SG02 LP1-EU-AM2-P	SUN-10K-SG02 LP1-EU-AM3-P	SUN-12K-SG02 LP1-EU-AM3-P
<b>Battery Input Data</b>				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	40-60			
Max. Charging/Discharging Current (A)	190	190	220	250
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)	15200	16000	20000	24000
Max. PV Input Power (W)	12160	12800	16000	19200
Max. PV Input Voltage (V)	500			
Start-up Voltage (V)	125			
MPPT Voltage Range (V)	150-425			
Rated PV Input Voltage (V)	370			
Max. Operating PV Input Current (A)	32+32		32+32+32	
Max. Input Short-Circuit Current (A)	60+60		60+60+60	
No. of MPP Trackers/ No. of Strings MPP Tracker	2/2+2		3/2+2+2	
<b>AC Input/Output Data</b>				
Rated AC Input/Output Active Power (W)	7600	8000	10000	12000
Max. AC Input/Output Apparent Power (VA)	8360	8800	11000	13200
Rated AC Input/Output Current (A)	34.6/33.1	36.4/34.8	45.5/43.5	54.6/52.2
Max. AC Input/Output Current (A)	38/36.4	40/38.3	50/47.9	60/57.4
Max. Continuous AC Passthrough (grid to load) (A)	50		60	
Peak Power (off-grid) (W)	2 times of rated power, 10s			
Power Factor Adjustment Range	0.8 leading to 0.8 lagging			
Rated input/output voltage	220/230V 0.85Un-1.1Un L+N+PE			
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65			
Total Current Harmonic Distortion THDi	<3% (of nominal power)			
DC Injection Current	<0.5% In			
<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, Arc Fault Circuit Interrupter (AFCI) (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current 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	2000m			
Noise (dB)	<45			
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)	420×670×233 (Excluding Connectors and Brackets)			
Weight (kg)	35.6			
Type of Cooling	Intelligent Air Cooling			
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy			
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, G99, VDE-AR-N 4105			
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			