

Single Phase Hybrid Inverter

SUN-12/14/16K-SG01LP1-EU



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 290A
- Support storing energy from diesel generator

Model	SUN-12K-SG01LP1-EU		SUN-14K-SG01LP1-EU		SUN-16K-SG01LP1-EU	
Battery Input Data						
Battery Type	Lead-acid or Lithium-ion					
Battery Voltage Range (V)	40-60					
Max. Charging/Discharging Current (A)	220	250		290		
Charging Strategy for Li-ion Battery	Self-adaption to BMS					
Number of Battery Input	2					
PV String Input Data						
Max. PV access power (W)	24000	28000		32000		
Max. PV Input Power (W)	19200	22400		25600		
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					
Max. Input Short-Circuit Current (A)	60+60+60					
No. of MPP Trackers/ No. of Strings MPP Tracker	3/2+2+2					
AC Input/Output Data						
Rated AC Input/Output Active Power (W)	12000	14000		16000		
Max. AC Input/Output Apparent Power (VA)	13200	15400		17600		
Rated AC Input/Output Current (A)	54.5/52.2	63.6/60.9		72.7/69.6		
Max. AC Input/Output Current (A)	60/57.4	70/67		80/76.5		
Max. Continuous AC Passthrough (grid to load) (A)	100					
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					
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), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current 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	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)	464×763×282 (Excluding Connectors and Brackets)					
Weight (kg)	52					
Type of Cooling	Intelligent Air Cooling					
Warranty	5 Years / Up to 10 Years* *Warranty period varies by installation country. Refer to the Warranty Policy for details.					
Grid Regulation	IEC 61727,IEC 62116,NRS 097					
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2					