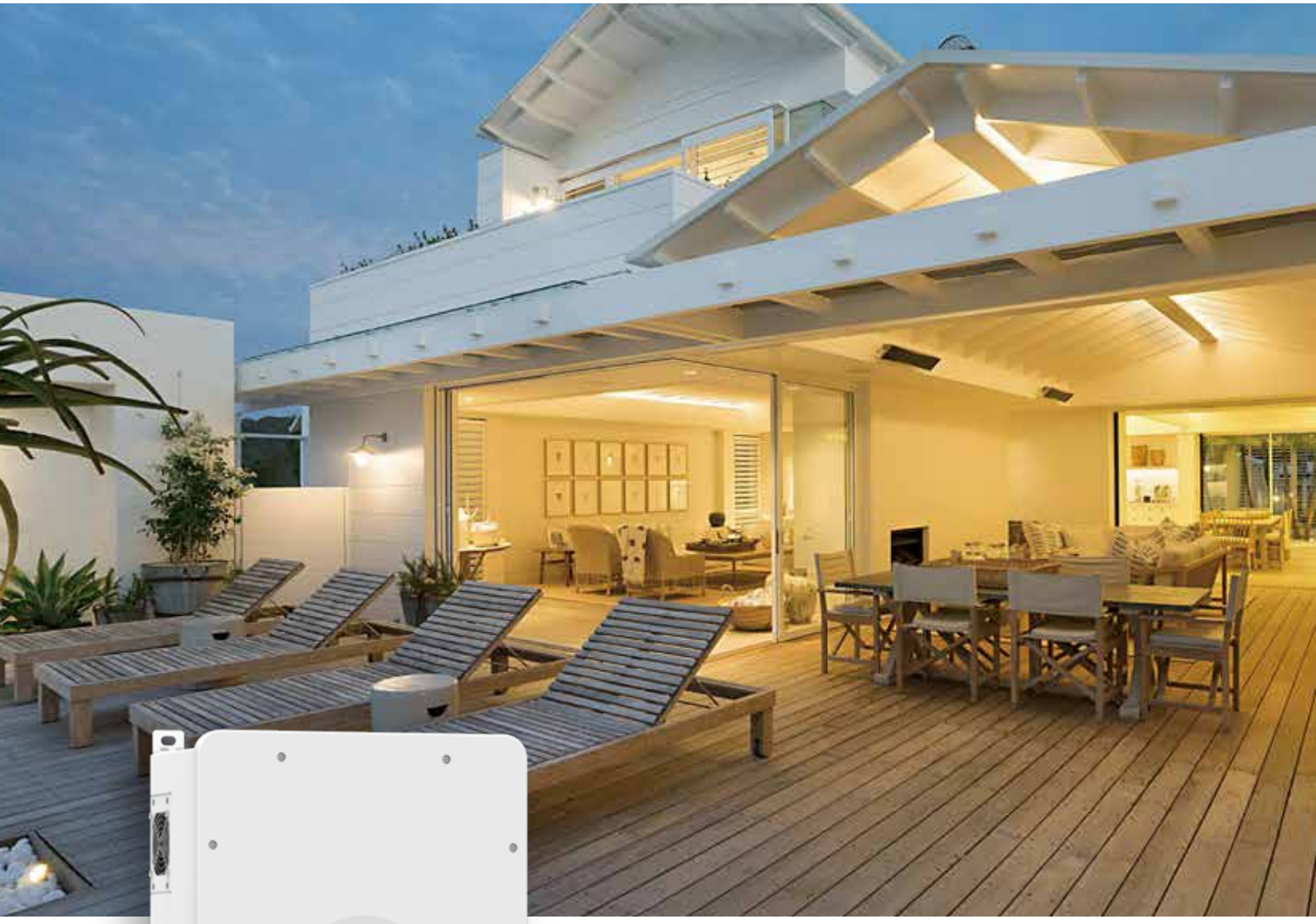
Split Phase Hybrid Inverter

SUN-5/6/7.6/8K-SG01LP1-US



- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- 16 — Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 190 — Max. charging/discharging current of 190A
- 6 — 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

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Stock Code: 605117.SH

Technical Data

Model	SUN-5K -SG01LP1-US	SUN-6K -SG01LP1-US	SUN-7.6K -SG01LP1-US	SUN-8K -SG01LP1-US
Battery Input Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	40-60			
Max. Charging Current (A)	120	135	190	190
Max. Discharging Current (A)	120	135	190	190
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
Number of Battery Input	1			
PV String Input Data				
Max. PV Input Power (W)	6500	7800	9880	10400
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)	13+13	26+13	26+26	
Max. Input Short-Circuit Current (A)	22+22	44+22	44+44	
No. of MPP Trackers/ No. of Strings per MPP Tracker	2/1+1	2/2+1	2/2+2	
AC Input/Output Data				
Rated AC Input/Output Active Power (W)	5000	6000	7600	8000
Max. AC Input/Output Apparent Power (VA)	5500	6600	8360	8800
Rated AC Input/Output Current (A)	20.8	25	31.7	33.3
Max. AC Input/Output Current (A)	22.9	27.5	34.8	36.7
Max. Continuous AC Passthrough (grid to load) (A)	40		50	
Peak Power (off-grid) (W)	2 times of rated power, 10s			
Power Factor Adjustment Range	0.9-1			
Rated Input/Output Voltage/Range (V)	120/240; 208 0.88Un＜U＜1.1Un			
Rated Input/Output Grid Frequency/Range(Hz)	60/55-65			
Grid Connection Form	2L+N+PE			
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 Polarity Reverse Connection Protection, AC Output Overcurrent Protection AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection DC Terminal Insulation Impedance Monitoring, DC Component Monitoring, Ground Fault Current Monitoring Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch Overvoltage Load Drop Protection, Residual Current (RCD) Detection, Surge protection level			
Surge Protection Level	TYPE II(DC), TYPE II(AC)			
Interface				
Communication Interface	RS485/RS232/CAN			
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)			
General Data				
Operating Temperature Range (**℃**)	-40 to +60°C, >45°C Derating			
Permissible Ambient Humidity	0-100%			
Permissible Altitude	2000m			
Noise (dB)	<30			
Ingress Protection(IP) Rating	TYPE3R			
Inverter Topology	Non-Isolated			
Over Voltage Category	OVC II(DC), OVC III(AC)			
Cabinet Size (WxHxD mm)	420×670×233 (Excluding Connectors and Brackets)			
Weight (kg)	30			
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	EN 50549, UNE 217002, NRS 097, IEEE 1547.1, SRD V2.0			
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2, UL 1741			

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