







Hybrid Inverter

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



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

Technical Data

Model	SUN-5K -SG01LP1-US	SUN-6K -SG01LP1-US	SUN-7.6K -SG01LP1-US/EU	SUN-8K -SG01LP1-US/EU
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
External Temperature Sensor	Yes			
Charging Curve	3 Stages / Equalization			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
PV String Input Data				
Max. DC Input Power (W)	6500	7800	9880	10400
Rated PV Input Voltage (V)	370 (125-500)			
Start-up Voltage (V)	125			
MPPT Voltage Range (V)	150-425			
Full Load DC Voltage Range (V)	300-425		200-425	
PV Input Current (A)	13+13	26+13		26+26
Max. PV I _{sc} (A)	22+22	44+22		44+44
No. of MPP Trackers	2			
No. of Strings per MPP Tracker	1+1	2+1		2+2
AC Output Data				
Rated AC Output Active Power (W)	5000	6000	7600	8000
Max AC Output Active Power (W)	5500	6600	8360	8800
AC Output Rated Current (A)	20.8/24	25/28.8	31.7/36.5	34.5/33
Max. AC Output Current (A)	22.9/26.4	27.5/31.7	34.8/40.2	38/36.3
Max. Continuous AC Passthrough (A)	50			
Peak Power (off grid)	2 time of rated power, 10 S			
Power Factor Adjustment Range	0.8 leading to 0.8 lagging			
Power Factor	1			
Output Frequency and Voltage	50 / 60Hz; L1/L2/N/PE 120/240Vac (split phase), 208Vac (2/3 phase), L/N/PE 220/230Vac (single phase)			
Grid Type	Split Phase; 2/3 phase; Single Phase			
Total Harmonics Current Distortion (THDI)	<3% (of nominal power)			
DC Current Injection	<0.5% In			
Efficiency				
Max. Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	99.90%			
Protection				
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection			
Over Voltage Category	DC Type II/AC Type III			
Certifications and Standards				
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			
General Data				
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating			
Cooling	Smart Cooling			
Noise (dB)	≤30 dB			
Communication with BMS	RS485; CAN			
Weight (kg)	32			
Cabinet Size (WxHxD mm)	420x670x233 (Excluding Connectors and Brackets)			
Protection Degree	IP65			
Installation Style	Wall-mounted			
Warranty	5 Years (10 Years Optional)			