

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	33.3/38.5	36.4/34.8
Max AC Output Current (A)	22.9/26.4	27.5/31.7	34.8/40.2	38/36.3	36.7/42.3	40/38.3
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 Harmonic Distortion (THD)	<3% (of nominal power)					
DC Current Injection	<0.5% I _n					
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 ()	-40-60°C, >45°C Derating					
Cooling	Smart Cooling					
Noise (dB)	≤30 dB					
Communication with BMS	RS485; CAN					
Weight (kg)	32					
Cabinet Size (WxHxD mm)	420×670×233 (Excluding Connectors and Brackets)					
Protection Degree	IP65					
Installation Style	Wall-mounted					
Warranty	5 Years (10 Years Optional)					