




# Hybrid Inverter

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



-  Colorful touch LCD, IP65 protection degree
-  DC couple and AC couple to retrofit existing solar system
- 16** Max. 16pcs 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

## Technical Data

Model	SUN-5K -SG01LP1-US	SUN-6K -SG01LP1-US	SUN-7.6K -SG01LP1-US/EU	SUN-8K -SG01LP1-US/EU		
<b>Battery Input Data</b>						
Battery Type	Lead-acid or Li-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					
<b>PV String Input Data</b>						
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 ISC (A)	17+17	34+17	34+34			
Number of MPPT / Strings per MPPT	2/1+1	2/2+1	2/2+2			
<b>AC Output Data</b>						
Rated AC Output and UPS Power (W)	5000	6000	7600	8000		
Max. AC Output Power (W)	5500	6600	8360	8800		
AC Output Rated Current (A)	20.8/24	25/28.8	31.7/36.5	34.5	33.3/38.5	36.4
Max. AC Current (A)	22.9/26.4	27.5/31.7	34.8/40.2	38	36.7/42.3	40
Max. Continuous AC Passthrough (A)	40		50			
Peak Power (off grid)	2 time of rated power, 10 S					
Power Factor	0.8 leading to 0.8 lagging					
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					
DC injection current (mA)	THD<3% (Linear load<1.5%)					
<b>Efficiency</b>						
Max. Efficiency	97.60%					
Euro Efficiency	97.00%					
MPPT Efficiency	99.90%					
<b>Protection</b>						
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Surge protection					
<b>Certifications and Standards</b>						
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11					
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2					
<b>General Data</b>						
Operating Temperature Range (°C)	-45~60 °C, >45°C derating					
Cooling	Smart cooling					
Noise (dB)	<30 dB					
Communication with BMS	RS485; CAN					
Weight (kg)	32					
Size (mm)	420Wx670Hx233D					
Protection Degree	IP65					
Installation Style	Wall-mounted					
Warranty	5 years					