

# Hybrid Inverter

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



Colorful touch LCD,  
IP65 protection degree

6

6 time periods for battery  
charging/discharging

190

Max. charging/discharging  
current of 190A

16

Frequency droop control,  
Max.16pcs parallel



DC couple and AC couple to  
retrofit existing solar system



Support storing energy from  
diesel generator

## Technical Specifications

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

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 Lithium-ion			
Battery Voltage Range (V)	40~60V			
Max. Charging Current (A)	120A	135A	190A	190A
Max. Discharging Current (A)	120A	135A	190A	190A
Charging Curve	3 Stages / Equalization			
External Temperature Sensor	Optional			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
<b>PV String Input Data</b>				
Max. DC Input Power (W)	6500W	7800W	9880W	10400W
PV Input Voltage (V)	370V (100V~500V)			
MPPT Range (V)	125V~425V			
Start-up Voltage (V)	150V			
PV Input Current (A)	11A+11A	22A+11A	22A+22A	22A+22A
No. of MPPT Trackers	2			
No. of Strings Per MPPT Tracker	1+1	2+1	2+2	2+2
<b>AC Output Data</b>				
Rated AC Output and UPS Power (W)	5000W	6000W	7600W	8000W
Max. AC Output Power (W)	5500W	6600W	8360W	8800W
Peak Power (off grid)	2 times of rated power, 10 S			
AC Output Rated Current (A)	20.8A	25A	31.7A / 33A	33.4A / 35A
Max. AC Current (A)	24A	28.8A	36.4A / 38A	38.3A / 40A
Max. Continuous AC Passthrough (A)	48A	80A	90A	90A
Output Frequency and Voltage	50 / 60Hz; 120 / 240Vac (split phase), 208Vac (2 / 3 phase), 230Vac (single phase)			
Grid Type	Split phase 、 2 / 3 phase 、 Single Phase			
Current Harmonic Distortion	THD<3% (Linear load<1.5%)			
<b>Efficiency</b>				
Max. Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	99.90%			
<b>Protection</b>				
PV Arc Fault Detection	Integrated (Except European Type)			
PV Input Lightning Protection	Integrated			
Anti-islanding Protection	Integrated			
PV String Input Reverse Polarity Protection	Integrated			
Insulation Resistor Detection	Integrated			
Residual Current Monitoring Unit	Integrated			
Output Over Current Protection	Integrated			
Output Shorted Protection	Integrated			
Output Over Voltage Protection	Integrated			
<b>Certifications and Standards</b>				
Grid Regulation	UL1741, IEEE1547, RULE21, VDE 0126, AS4777, NRS2017, G98, G99, IEC61683, IEC62116, IEC61727			
Safety Regulation	IEC62109-1, IEC62109-2			
EMC	EN61000-6-1, EN61000-6-3, FCC 15 class B			
<b>General Data</b>				
Operating Temperature Range (°C)	-25~60°C, >45°C Derating			
Cooling	Fan			
Noise (dB)	<30			
Communication with BMS	RS485; CAN			
Weight (kg)	32			
Size (mm)	670W×420H×233D			
Protection Degree	IP65			
Installation Style	Wall-mounted			
Warranty	5 years			