

Hybrid Inverter

SUN-5K/6K-SG01LP1-US

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



Max. Efficiency
97.6%



2 MPPT



RS485/CAN



Internal SPD



Zero Export



IP65
Ingress Protection



High Power
Factor



High Surge
Endurance



AC Coupled



Support Generator
Connection

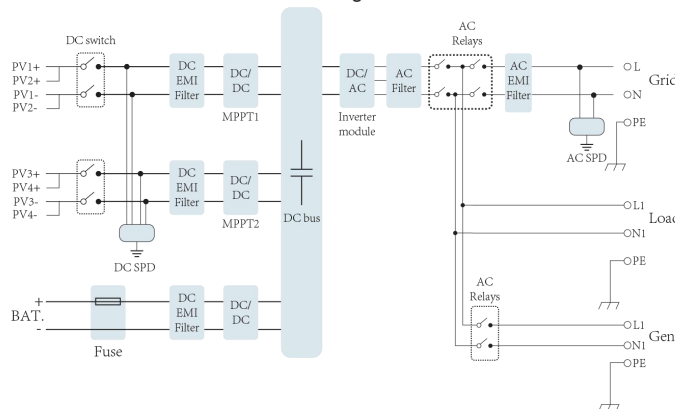


Six Time of
Use Setting

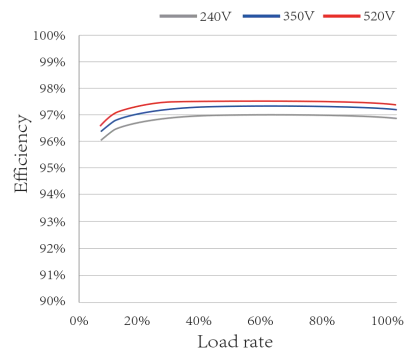


Support Multiple
Parallel

Circuit block diagram



Efficiency curve



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

Technical Specifications

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 Li-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			
PV String Input Data				
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)	125V			
PV Input Current (A)	11A+11A	18A+9A	18A+18A	18A+18A
No.ofMPPT Trackers	2			
No.of Strings Per MPPT Tracker	1+1	2+1	2+2	2+2
AC Output Data				
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)	35A	35A	50A	50A
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%)			
Efficiency				
Max.Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	99.90%			
Protection				
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			
Certifications and Standards				
Grid Regulation	UL1741,IEEE1547,RULE21,VDE 0126,AS4777,NRS2017,G98,G99			
Safety Regulation	IEC62109-1, IEC62109-2			
EMC	EN61000-6-1, EN61000-6-3, FCC 15 class B			
General Data				
Operating Temperature Range (C)	-25~60C, >45C Derating			
Cooling	Fan			
Noise (dB)	<30			
Communication with BMS	RS485; CAN			
Weight (kg)	32KG			
Size (Length*Width*Height mm)	680×420×233mm			
Protection Degree	IP65			
Installation Style	Wall-mounted			
Warranty	5 years			