

Three Phase Hybrid Inverter

SUN- 5 / 8 / 10 / 15 K-SG01HP3-US-AM2



- 100** 100% unbalanced output, each phase; Max. output up to **50%** rated power
- DC** DC couple and AC couple to retrofit existing solar system
- 10** Max. 10pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 50** Max. charging/discharging current of 50A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
- GEN** Support storing energy from diesel generator

Technical Data

Model	SUN-5K-SG01HP3 -US-AM2	SUN-8K-SG01HP3 -US-AM2	SUN-10K-SG01HP3 -US-AM2	SUN-15K-SG01HP3 -US-AM2
Battery Input Data				
Battery Type	Li-Ion			
Battery Voltage Range (V)	160~500			
Max. Charging Current (A)	50			
Max. Discharging Current (A)	50			
Number of battery input	1			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
PV String Input Data				
Max. DC Input Power (W)	6500	10400	13000	19500
Max. DC Input Voltage (V)	550			
Start-up Voltage (V)	180			
MPPT Range (V)	150-500			
Full Load DC Voltage Range (V)	163-500	227-500	250-500	317-500
Rated DC Input Voltage (V)	380			
PV Input Current (A)	20+20	26+20	26+26	
Max. PV I _{sc} (A)	23+23	32+23	32+32	
No. of MPPT Trackers	2			
No. of Strings per MPPT Tracker	1	2+1	2	
AC Output Data				
Rated AC Output and UPS Power (W)	5000	8000	10000	15000
Max. AC Output Power (W)	5000	8000	10000	15000
AC Output Rated Current (A)	13.9	22.2	27.8	41.7
Max. AC Current (A)	13.9	22.2	27.8	41.7
Max. Continuous AC Passthrough (A)	80			
Peak Power (off grid)	1.5 time of rated power, 10 S			
Generator input/Smart load /AC couple current (A)	13.9 / 80 / 13.9	22.2 / 80 / 22.2	27.8 / 80 / 27.8	41.6 / 80 / 41.6
Power Factor	0.8 leading to 0.8 lagging			
Output Frequency and Voltage	50/60Hz; L1/L2/L3/N(PE) 120/208Vac			
Grid Type	Three Phase			
DC injection current (mA)	<0.5%I _n			
Efficiency				
Max. Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	99.90%			
Protection				
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, Output Shorted Protection, Surge protection			
Output Over Voltage Protection	DC Type II/AC Type III			
Certifications and Standards				
Grid Regulation	IEEE 1547-2018, IEEE 1547.1-2020, UL 1699B, UL 1998			
Safety EMC / Standard	UL 1741-2021, FCC			
General Data				
Operating Temperature Range (°C)	-40~60°C, >45°C derating			
Cooling	Smart cooling			
Noise (dB)	<45 dB			
Communication with BMS	RS485; CAN			
Weight (kg)	30.5			
Size (mm)	408W×638H×237D			
Protection Degree	TYPE 3R			
Installation Style	Wall-mounted			
Warranty	5 years			