

Single Phase Hybrid Inverter

SUN-3.6/5/6/7/7.6/8/10K-SG05LP1-AU-AM2-P



Intuitive

- Colorful touch LCD, IP65 protection degree



Intelligent

- 6 time periods for battery charging/discharging



Flexible

- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; support multiple batteries parallel



Reliable

- Max. charging/discharging current of 210A
- Support storing energy from diesel generator

Model	SUN-3.6K-SG05 LP1-AU-AM2-P	SUN-5K-SG05 LP1-AU-AM2-P	SUN-6K-SG05 LP1-AU-AM2-P	SUN-7K-SG05 LP1-AU-AM2-P	SUN-7.6K-SG05 LP1-AU-AM2-P	SUN-8K-SG05 LP1-AU-AM2-P	SUN-10K-SG05 LP1-AU-AM2-P
Battery Input Data							
Battery Type	Lead-acid or Lithium-ion						
Battery Voltage Range (V)	40-60						
Max. Charging/Discharging Current (A)	90	120	135	175	190	190	210
Charging Strategy for Li-ion Battery	Self-adaption to BMS						
Number of Battery Input	1						
PV String Input Data							
Max. PV access power (W)	7200	10000	12000	14000	15200	16000	20000
Max. PV Input Power (W)	5760	8000	9600	11200	12160	12800	16000
Max. PV Input Voltage (V)	500						
Start-up Voltage (V)	125						
MPPT Voltage Range (V)	150-425						
Rated PV Input Voltage (V)	370						
Max. Operating PV Input Current (A)	18+18			32+32			
Max. Input Short-Circuit Current (A)	27+27			48+48			
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1			2/2+2			
AC Input/Output Data							
Rated AC Input/Output Active Power (W)	3600	5000	6000	7000	7600	8000	9999
Rated/Max. AC Input/Output Apparent Power (VA)	3600	5000	6000	7000	7600	8000	9999
Rated AC Input/Output Current (A)	15.7	21.8	26.1	30.5	33.1	34.8	43.5
Max. AC Input/Output Current (A)	15.7	21.8	26.1	30.5	33.1	34.8	43.5
Max. Continuous AC Passthrough (grid to load) (A)	35		40	50			
Peak Power (off-grid) (W)	2 times of rated power, 10s						
Power Factor Adjustment Range	0.8 leading to 0.8 lagging						
Rated input/output voltage	230/240V 0.85Un-1.1Un L+N+PE						
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55						
Total Current Harmonic Distortion THDi	<3% (of nominal power)						
DC Injection Current	<0.5% In						
Generator Data							
Nominal Input Voltage(V)	230V/240V						
Rated Input Current(A)	15.7	21.8	26.1	30.5	33.1	34.8	43.5
Power Factor	0.8 leading-0.8 lagging						
Frequency	50Hz						
Bcakup Data							
Nominal Output Voltage(V)	230V/240V						
Rated Output Current(A)	15.7	21.8	26.1	30.5	33.1	34.8	43.5
Rated Apparent Power(VA)	3600	5000	6000	7000	7600	8000	9999
Power Factor	0.8 leading-0.8 lagging						
Frequency	50Hz						
Efficiency							
Max. Efficiency	97.6%						
Euro Efficiency	96.5%						
MPPT Efficiency	>99%						
Equipment Protection							
Integrated	DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (AFCI) (optional), Anti-islanding Protection(Active Frequency shift), DC Switch, Insulation Impedance Detection, Residual Current Detection						
Surge Protection Level	TYPE II(DC), TYPE II(AC)						
Interface							
LCD/LED Display	LCD						
Communication Interface	WIFI, RS485, CAN						
General Data							
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating						
Permissible Ambient Humidity	0-100%						
Permissible Altitude	2000m						
Noise (dB)	<45						
Ingress Protection(IP) Rating	IP 65						
Protection Level	Class I						
Inverter Topology	Non-Isolated (solar), Isolated (battery)						
Over Voltage Category	OVC II(DC), OVC III(AC)						
Cabinet Size (WxHxD mm)	330×580×232 (Excluding Connectors and Brackets)						
Weight (kg)	24.9						
Type of Cooling	Intelligent air cooling						
Warranty	10 Years						
Grid Regulation	AS/NZS 4777.2						
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2						