

# Single Phase Hybrid Inverter

SUN-3.6/5/6/7/7.6/8/10K-SG05LP1-EU-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-EU-AM2-P	SUN-5K-SG05 LP1-EU-AM2-P	SUN-6K-SG05 LP1-EU-AM2-P	SUN-7K-SG05 LP1-EU-AM2-P	SUN-7.6K-SG05 LP1-EU-AM2-P	SUN-8K-SG05 LP1-EU-AM2-P	SUN-10K-SG05 LP1-EU-AM2-P
<b>Battery Input Data</b>							
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						
<b>PV String Input Data</b>							
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			
<b>AC Input/Output Data</b>							
Rated AC Input/Output Active Power (W)	3600	5000	6000	7000	7600	8000	10000
Max. AC Input/Output Apparent Power (VA)	3960	5500	6600	7700	8360	8800	11000
Rated AC Input/Output Current (A)	16.4/15.7	22.7/21.7	27.3/26.1	31.9/30.5	34.5/33	36.4/34.8	45.5/43.5
Max. AC Input/Output Current (A)	18/17.2	25/23.9	30/28.7	35/33.5	38/36.3	40/38.3	50/47.9
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	220/230V 0.85Un-1.1Un L+N+PE						
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65						
Total Current Harmonic Distortion THDi	<3% (of nominal power)						
DC Injection Current	<0.5% In						
<b>Efficiency</b>							
Max. Efficiency	97.6%						
Euro Efficiency	96.5%						
MPPT Efficiency	>99%						
<b>Equipment Protection</b>							
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, DC Switch, Insulation Impedance Detection, Residual Current Detection						
Surge Protection Level	TYPE II(DC), TYPE II(AC)						
<b>Interface</b>							
LCD/LED Display	LCD						
Communication Interface	WIFI, RS485, CAN						
<b>General Data</b>							
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						
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	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy						
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105						
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2						