Single Phase Hybrid Inverter

SUN-3.6/5/6/7/7.6/8/10K-SG05LP1-EU-SM2-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

Technical Data

Model	SUN-3.6K-SG05 LP1-EU-SM2-P	SUN-5K-SG05 LP1-EU-SM2-P	SUN-6K-SG05 LP1-EU-SM2-P	SUN-7K-SG05 LP1-EU-SM2-P	SUN-7.6K-SG05 LP1-EU-SM2-P	SUN-8K-SG05 LP1-EU-SM2-P	SUN-10K-SG05 LP1-EU-SM2-P
Battery Input Data							
	Lead-acid or Lithium-ion						
	40-60						
	90	120	135	175	190	190	210
	Self-adaption to BMS						
	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	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	22.8/21.8	27.3/26.1	31.9/30.5	34.6/33.1	36.4/34.8	45.5/43.5
Max. AC Input/Output Current (A)	18/17.3	25/24	30/28.7	35/33.5	38/36.4	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						
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, 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						
Inverter Topology	Non-Isolated (solar), Isolated (battery)						
Over Voltage Category	OVC II(DC), OVC III(AC)						
Cabinet Size (WxHxD mm)	366×589.5×237 (Excluding Connectors and Brackets)						
Weight (kg)	26.8						
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						

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