

Hybrid Inverter

SUN-3/5K-SG05LP1



Colorful touch LCD, IP65 protection degree



DC couple and AC couple to retrofit existing solar system

16

Max. 16pcs parallel for on-grid and o_c- grid operation; Support multiple batteries parallel

190

Max. charging/discharging current of 190A

6

6 time periods for battery charging/discharging



Support storing energy from diesel generator

Technical Data

Model	SUN-3K -SG04/05LP1	SUN-5K -SG04/05LP1
Battery Input Data		
Battery Type	Lead-acid or Li-Ion	
Battery Voltage Range (V)	40~60	
Max. Charging Current (A)	70	120
Max. Discharging Current (A)	70	120
External Temperature Sensor	Yes	
Charging Curve	3 Stages / Equalization	
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	
PV String Input Data		
Max. DC Input Power (W)	3900	6500
Rated PV Input Voltage (V)	370 (125~500)	
Start-up Voltage (V)	125	
MPPT Voltage Range (V)	150-425	
Full Load DC Voltage Range (V)	300-425	
PV Input Current (A)	13	13+13
Max. PV ISC (A)	17	17+17
Number of MPPT / Strings per MPPT	1/1	2/1+1
AC Output Data		
Rated AC Output and UPS Power (W)	3000	5000
Max. AC Output Power (W)	3300	5500
AC Output Rated Current (A)	13.6	21.7
Max. AC Current (A)	15	25
Max. Continuous AC Passthrough (A)	35	
Peak Power (o _c grid)	2 time of rated power, 10 S	
Power Factor	0.8 leading to 0.8 lagging	
Output Frequency and Voltage	50/60Hz; L/N/PE 220/230Vac (single phase)	
Grid Type	Single Phase	
DC injection current (mA)	THD<3% (Linear load<1.5%)	
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, Surge protection	
Certifications and Standards		
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11	
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2	
General Data		
Operating Temperature Range (°C)	-45~60°C, >45°C derating	
Cooling	Natural cooling	
Noise (dB)	<30 dB	
Communication with BMS	RS485; CAN	
Weight (kg)	20.5	
Size (mm)	330W x 580H x232D	
Protection Degree	IP65	
Installation Style	Wall-mounted	
Warranty	5 years	

PEA & MEA LIST

