

# Hybrid Inverter

SUN-3/3.6/5/6K-SG03LP1-EU



Colorful touch LCD, IP65 protection degree



DC couple and AC couple to retrofit existing solar system

16

Max. 16pcs parallel for on-grid and off-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 -SG03/05LP1-EU	SUN-3.6K -SG03/05LP1-EU	SUN-5K -SG03/05LP1-EU	SUN-6K -SG03/05LP1-EU
<b>Battery Input Data</b>				
Battery Type	Lead-acid or Li-Ion			
Battery Voltage Range (V)	40~60			
Max. Charging Current (A)	70	90	120	135
Max. Discharging Current (A)	70	90	120	135
External Temperature Sensor	Yes			
Charging Curve	3 Stages / Equalization			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
<b>PV String Input Data</b>				
Max. DC Input Power (W)	3900	4680	6500	7800
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		
<b>AC Output Data</b>				
Rated AC Output and UPS Power (W)	3000	3600	5000	6000
Max. AC Output Power (W)	3300	3690	5500	6600
AC Output Rated Current (A)	13.6	16.4	22.7	27.3
Max. AC Current (A)	15	18	25	30
Max. Continuous AC Passthrough (A)	35			40
Peak Power (off 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%)			
<b>Efficiency</b>				
Max. Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	99.90%			
<b>Protection</b>				
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			
<b>Certifications and Standards</b>				
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			
<b>General Data</b>				
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			