

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

Description



- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 135A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Specifications

Model	SUN-3.6K-SG03LP1-EU	SUN-5K-SG03LP1-EU	SUN-6K-SG03LP1-EU
Battery Input Data			
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range (V)	40~60		
Max. Charging Current (A)	90	120	135
Max. Discharging Current (A)	90	120	135
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)	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	300~425		
PV Input Current (A)	13+13		
Max. PV ISC (A)	17+17		
No.of MPPT Trackers	2		
No.of Strings Per MPPT Tracker	1+1		
AC Output Data			
Rated AC Output Active Power (W)	3600	5000	6000
Max AC Output Active Power (W)	3690	5500	6600
AC Output Rated Current (A)	16.4/15.7	22.7/21.7	27.3/26.1
Max AC Output Current (A)	18/17.2	25/23.9	30/28.7
Max. Continuous AC Passthrough (A)	35	40	
Peak Power (offff grid)	2 time of rated power, 10 S		
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Power Factor	1		
Output Frequency and Voltage	50/60Hz; L/N/PE 220/230Vac		
Grid Type	Single Phase		

Total Harmonic Distortion (THD) <3% (of nominal power)

DC Current Injection <0.5% I_n

Efficiency

Max. Efficiency 97.60%

Euro Efficiency 96.50%

MPPT Efficiency 99.90%

Protection

Integrated Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection

Over Voltage Category DC Type II / AC Type A

Certifications and Standards

Grid Regulation VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150

Safety EMC / Standard IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2

General Data

Operating Temperature Range ($^{\circ}C$) -40~60 $^{\circ}C$, >45 $^{\circ}C$ Derating

Cooling Smart cooling

Noise (dB) ≈ 30 dB

Communication with BMS RS485; CAN

Weight (kg) 20.5

Cabinet Size (WxHxD mm) 330~580~232 (Excluding Connectors and Brackets)

Protection Degree IP65

Installation Style Wall-mounted

Warranty 5 Years (10 Years Optional)