

Hybrid Inverter

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



-  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 Data

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 (V)	300-425					
PV Input Current (A)	13+13					
Max. PV I _{SC} (A)	17+17					
No.of MPP Trackers	2					
No.of Strings per MPP Tracker	1+1					
AC Output Data						
Rated AC Output Active Power (W)	3600	5000	6000			
Max. AC OutputActive Power (W)	3960	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 (off 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 Harmonics Current Distortion (THDi)	<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 III					
Certifications and Standards						
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					
General Data						
Operating Temperature Range ()	-40-60°C, >45°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)					