Hybrid Inverter

SUN-12/14/16K-SG01LP1-EU





- Colorful touch LCD, IP65 protection degree
- DC couple and 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 290A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-12K-SG01LP1-EU	SUN-14K-SG01LP1-EU	SUN-16K-SG01LP1-EU
Battery Data			
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range (V)	40-60		
Max. Charging Current (A)	220	250	290
Max. Discharging Current (A)	220	250	290
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)	15600	18200	20800
Max. DC Input Voltage (V)	500		
Start-up Voltage (V)	125		
MPPT Range (V)	150-425		
Rated DC Input Voltage (V)	370		
PV Input Current (A)	26+26+26		
Max. PV I_{SC} (A)	44+44+44		
No.of MPP Trackers	3		
No.of Strings per MPP Tracker	2+2+2		
AC Output Data			
Rated AC Output Active Power (W)	12000	14000	16000
Max AC Output Active Power (W)	13200	15400	17600
Rated AC Output Current (A)	54.5/52.2	63.6/60.9	72.7/69.6
Max AC Output Current (A)	60/57.4	70/67	80/76.5
Max. Continuous AC Passthrough (A)	100		
Peak Power (Off Grid)	2 time of rated power, 5 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% In		
Backup Data			
Backup Power (W)	10000	12000	14000
Backup Rated Current (A)	45.5/43.5	54.5/52.2	63.6/60.9
Backup UPS	4ms Automatic switchover time		
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	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 (℃)	-40-60°C, >45°C Derating		
Cooling	Smart Cooling		
Noise (dB)	≤30 dB		
Communication with BMS	RS485; CAN		
Weight (kg)	48.5		
Cabinet Size (WxHxD mm)	464×763×282 (Excluding Connectors and Brackets)		
Protection Degree	IP65		
Installation Style	Wall-mounted		
Warranty	5 Years (10 Years Optional)		