Single Phase Hybrid Inverter

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

- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16pcs 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-AU	SUN-14K-SG01LP1-AU	SUN-16K-SG01LP1-AU
Battery Data			
Battery Type	Lead-acid or Li-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. PV Input Power (W)	18000	21000	24000
Max. PV Input Voltage (V)	500		
Start-up Voltage (V)	125		
MPPT Range (V)	150-425		
Rated PV 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		
AC Output Data			
Rated AC OutputPower (W)	12000	14000	16000
Max AC Output Active Power (W)	12000	14000	16000
Rated AC Output Current (A)	52.2	60.9	69.6
Max. AC Output Current (A)	52.2	60.9	69.6
Max. Continuous AC Passthrough (A)	100		
Peak Power (off grid)	2 time of rated power, 5 S		
Power Factor	0.8 leading to 0.8 lagging		
Output Frequency and Voltage	230V/240V0.85Un-1.1Un		
Grid Connection Form	L+N+PE		
Total Harmonics Current Distortion (THDi)	< 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	6ms 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	AS/NZS 4777.2		
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 to +60℃, >45℃ derating		
Cooling	Smart cooling		
Noise (dB)	<30 dB		
Communication with BMS	RS485; CAN		
Weight (kg)	48		
Size (mm)	464W×763H×282D（Excluding connectors and brackets）		
Protection Degree	IP65		
Installation Style	Wall-mounted		
Warranty	10 Years		