Single Phase Hybrid Inverter

SUN- 8K-SG05LP1-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 190A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-8K-SG05LP1-AU
Battery Input Data	
Battery Type	Lead-acid or Li-Ion
Battery Voltage Range (V)	40-60
Max. Charging Current (A)	190
Max. Discharging Current (A)	190
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)	12000
Rated PV Input Voltage (V)	370 (125-500)
Start-up Voltage (V)	125
MPPT Voltage Range (V)	150-425
Full Load PV Voltage Range (V)	200-425
PV Input Current (A)	26+26
Max. PV I_{SC} (A)	39+39
Number of MPPT / Strings per MPPT	2/2+2
AC Output Data	
Rated AC Output and UPS Power (VA)	8000
Max. AC Output Power (W)	8000
AC Output Rated Current (A)	34.8
Max. AC Output Current (A)	34.8
Max. Continuous AC Passthrough (A)	50
Peak Power (off grid)	2 time of rated power, 10 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
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	Natural cooling
Noise (dB)	<30 dB
Communication with BMS	RS485; CAN
Weight (kg)	24.9
Size (mm)	330W x 580H x232D （Excluding connectors and brackets）
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	10 Years