

Single Phase Hybrid Inverter

SUN-3/3.6/5/6K-SG04LP1-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 135A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

Technical Data

Model	SUN-3K -SG04LP1-24-AU	SUN-3K -SG04LP1-AU	SUN-3.6K -SG04LP1-AU	SUN-5K -SG04LP1-AU	SUN-6K -SG04LP1-AU
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	40-60				
Max. Charging Current (A)	140	70	90	120	135
Max. Discharging Current (A)	140	70	90	120	135
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
Number of Battery Input	1				
PV String Input Data					
Max. PV access power(W)	6000	6000	7200	10000	12000
Max. DC Input Power (W)	4500	4500	5400	7500	9000
Rated PV Input Voltage (V)	500				
Start-up Voltage (V)	125				
MPPT Voltage Range (V)	150-425				
Rated DC Input Voltage(V)	370				
Max. Operating PV Input Current (A)	13		13+13		
Max. Input Short-Circuit Current (A)	19.5		19.5+19.5		
No. of MPP Trackers/ No. of Strings MPP Tracker	1/1		2/1+1		
AC Output Data					
Rated AC Output Active Power (W)	3000		3600	5000	6000
Max AC Output Active Power (W)	3000		3600	5000	6000
AC Output Rated Current (A)	13		15.7	21.7	26.1
Max. AC Output Current (A)	13		15.7	21.7	26.1
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				
Rated Input/Output Voltage/Range (V)	230 /240 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz				
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	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level				
Over Voltage Category	TYPE II(DC), TYPE II(AC)				
Interface					
Communication Interface	RS485/CAN				
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)				
General Data					
Operating Temperature Range (°C)	-40 to +60°C, >45°C derating				
Permissible Ambient Humidity	0-100%				
Permissible Altitude	2000m				
Noise (dB)	<30 dB				
Inverter Topology (solar/battery)	Transformerless/ HF Transformer				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Weight (kg)	17				
Cabinet size (mm)	330W x 433H x229D (Excluding connectors and brackets)				
Protection Degree	IP65				
Type of Cooling	Intelligent Air Cooling				
Warranty	10 Years				
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				