Single Phase Hybrid Inverter

SUN-3K-SG04LP1-24-AU
SUN-3/3.6/5/6K-SG04LP1-AU

Intuitive

- Colorful touch LCD, IP65 protection degree

Intelligent

- 6 time periods for battery charging/discharging

Flexible

- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; support multiple batteries parallel

Reliable

- Max. charging/discharging current of 140A
- 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)	20-30	40-60			
Max. Charging/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		7200	10000	12000
Max. PV Input Power (W)	4500		5400	7500	9000
Max. PV Input Voltage (V)	500				
Start-up Voltage (V)	125				
MPPT Voltage Range (V)	150-425				
Rated PV Input Voltage (V)	370				
Max. Operating PV Input Current (A)	18		18+18		
Max. Input Short-Circuit Current (A)	27		27+27		
No. of MPP Trackers/ No. of Strings MPP Tracker	1/1		2/1+1		
AC Input/Output Data					
Rated AC Input/Output Active Power (W)	3000		3600	5000	6000
Max. AC Input/Output Apparent Power (VA)	3000		3600	5000	6000
Rated AC Input/Output Current (A)	13		15.7	21.7	26.1
Max. AC Input/Output Current (A)	13		15.7	21.7	26.1
Max. Continuous AC Passthrough (grid to load) (A)	35				40
Peak Power (off-grid) (W)	2 times of rated power, 10s				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated input/output voltage	230/240V 0.85Un-1.1Un L+N+PE				
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55				
Total Current Harmonic Distortion THDi	<3% (of nominal power)				
DC Injection Current	<0.5% In				
Efficiency					
Max. Efficiency	97.6%				
Euro Efficiency	96.5%				
MPPT Efficiency	>99%				
Equipment Protection					
Integrated	DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (AFCI) (optional), Anti-islanding Protection(Active Frequency shift), DC Switch, Insulation Impedance Detection, Residual Current Detection				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
LCD/LED Display	LCD				
Communication Interface	WIFI, RS485, CAN				
General Data					
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating				
Permissible Ambient Humidity	0-100%				
Permissible Altitude	2000m				
Noise (dB)	<45				
Ingress Protection(IP) Rating	IP 65				
Protection Level	Class I				
Inverter Topology	Non-Isolated				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet Size (WxHxD mm)	330×433×228 (Excluding Connectors and Brackets)				
Weight (kg)	17				
Type of Cooling	Natural 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				