



Three Phase Hybrid Inverter

SUN-12/15K-SG01HP2-US-AM2



- 100** 100% unbalanced output, each phase
-  AC couple to retrofit existing solar system
- 10** Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 50** Max. charging/discharging current of 50A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

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Stock Code: 605117.SH

Model	SUN-12K-SG01HP2-US-AM2	SUN-15K-SG01HP2-US-AM2
Battery Input Data		
Battery Type	Lithium-ion	
Battery Voltage Range (V)	160-500	
Max. Charging Current (A)	50	
Max. Discharging Current (A)	50	
Charging Strategy for Li-ion Battery	Self-adaption to BMS	
Number of Battery Input	1	
PV String Input Data		
Max. PV Input Power (W)	12000	15000
Max. PV Input Voltage (V)	550	
Start-up Voltage (V)	180	
MPPT Voltage Range (V)	150-500	
Rated PV Input Voltage (V)	380	
Max. Operating PV Input Current (A)	26+26	
Max. Input Short-Circuit Current (A)	39+39	
No. of MPP Trackers/ No. of Strings per MPP Tracker	2/2+2	
AC Input/Output Data		
Rated AC Input/Output Active Power (W)	12000	8000
Max. AC Input/Output Apparent Power (VA)	12000	8800
Rated AC Input/Output Current (A)	50	62.5
Max. AC Input/Output Current (A)	50	62.5
Max. Three-phase Unbalanced Output Current (A)	50	62.5
Max. Continuous AC Passthrough (grid to load) (A)	150	
Peak Power (off-grid) (W)	1.5 times of rated power, 10s	
Power Factor Adjustment Range	0.8 leading to 0.8 lagging	
Rated Input/Output Voltage/Range (V)	120/240, 208 0.85Un-1.1Un	
Rated Input/Output Grid Frequency/Range	60Hz/55Hz-65Hz	
Grid Connection Form	2L+N+PE	
Total Current Harmonic Distortion THDi	<3% (of nominal power)	
DC Injection Current	<0.5% In	
Efficiency		
Max. Efficiency	97.60%	
Euro Efficiency	96.50%	
MPPT Efficiency	>99%	
Equipment Protection		
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection DC Terminal Insulation Impedance Monitoring, DC Component Monitoring, Ground Fault Current Monitoring Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch Overvoltage Load Drop Protection, Residual Current (RCD) Detection, Surge protection level	
Surge Protection Level	TYPE II(DC), TYPE II(AC)	
Interface		
Communication Interface	WIFI, RS485, CAN	
General Data		
Operating Temperature Range ()	-40 to +60°C, >45°C Derating	
Permissible Ambient Humidity	0-100%	
Permissible Altitude	2000m	
Noise (dB)	≤55	
Ingress Protection(IP) Rating	TYPE3R	
Inverter Topology	Non-Isolated	
Over Voltage Category	OVC II(DC), OVC III(AC)	
Cabinet Size (WxHxD mm)	408×678×247 (Excluding Connectors and Brackets)	
Weight (kg)	30	
Type of Cooling	Intelligent Air Cooling	
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy	
Grid Regulation	IEEE 1547.1, SRD V2.0	
Safety / EMC Standard	FCC, UL 1741	