

Split Phase Hybrid Inverter

SUN-8/10/12/15K-SG01HP2-US-AM2



- 100** 100% unbalanced output, max. output up to 50% rated power for each phase
- AC couple** to retrofit existing solar system
- 10** Max. 10pcs 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

Technical Data

Model	SUN-8K-SG01HP2 -US-AM2	SUN-10K-SG01HP2 -US-AM2	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 Access Power (W)	16000	20000	24000	30000
Max. PV Input Power (W)	12000	15000	18000	22500
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 MPP Tracker	2/2+2			
AC Input/Output Data				
Rated AC Input/Output Active Power (W)	8000	10000	12000	15000
Max. AC Input/Output Apparent Power (VA)	8000	10000	12000	15000
Rated AC Input/Output Current (A)	33.4	41.7	50	62.5
Max. AC Input/Output Current (A)	33.4	41.7	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(Hz)	60/55-65			
Grid Connection Form	2L+N+PE			
Total Current Harmonic Distortion THDi	<3% (of nominal power)			
DC Injection Current	<0.5% In			
Efficiency				
Max. Efficiency	97.6%			
Euro Efficiency	97.0%			
MPPT Efficiency	>99%			
Equipment 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			
Surge Protection Level	TYPE II(DC), TYPE II(AC)			
Interface				
Communication Interface	RS485/RS232/CAN			
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)			
General Data				
Operating Temperature Range ()	-40 to +60℃, >45℃ 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)	436×680×277.5 (Excluding Connectors and Brackets)			
Weight (kg)	34.8			
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			