

Split Phase Hybrid Inverter

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



Efficient

- High voltage battery, higher efficiency



Intelligent

- 6 time periods for battery charging/discharging



Flexible

- AC couple to retrofit existing solar system
- Max. 10 pcs parallel for on-grid and off-grid operation; support multiple batteries parallel



Reliable

- Max. charging/discharging current of 50A
- Support storing energy from diesel generator
- 100% unbalanced output

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/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)	2 times of rated power, 10s			
Power Factor Adjustment Range	0.8 leading to 0.8 lagging			
Rated input/output voltage	120/240 0.85Un-1.1Un 2L+N+PE			
Rated Input/Output Grid Frequency/Range(Hz)	60/55-65			
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, 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)	≤55			
Ingress Protection(IP) Rating	TYPE3R			
Inverter Topology	Non-Isolated			
Over Voltage Category	OVC II(DC),OVC IV(AC)			
Cabinet Size (WxHxD mm)	408×678×247 (Excluding Connectors and Brackets)			
Weight (kg)	30			
Type of Cooling	Intelligent Air Cooling			
Warranty	5 Years / Up to 10 Years* *Warranty period varies by installation country. Refer to the Warranty Policy for details.			
Grid Regulation	IEEE 1547.1, SRD V2.0			
Safety / EMC Standard	FCC, UL 1741			