Three Phase Hybrid Inverter

SUN-30K-SG01HP3-US-BM3-277V
SUN-40/50/60K-SG01HP3-US-BM4-277V





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

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Stock Code: 605117.SH

Technical Data

Model	SUN-30K-SG01HP3 -US-BM3-277V	SUN-40K-SG01HP3 -US-BM4-277V	SUN-50K-SG01HP3 -US-BM4-277V	SUN-60K-SG01HP3 -US-BM4-277V
Battery Input Data				
Battery Type	Lithium-ion			
Battery Voltage Range (V)	160-800			
Max. Charging Current (A)	50+50			
Max. Discharging Current (A)	50+50			
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
Number of Battery Input	2			
PV String Input Data				
Max. PV Input Power (W)	39000	52000	65000	78000
Max. PV Input Voltage (V)	1000			
Start-up Voltage (V)	180			
MPPT Voltage Range (V)	150-850			
Rated PV Input Voltage (V)	600			
Max. Operating PV Input Current (A)	36+36+36	36+36+36+36		
Max. Input Short-Circuit Current (A)	55+55+55	55+55+55+55		
No. of MPP Trackers/ No. of Strings per MPP Tracker	3/2+2+2	4/2+2+2+2		
AC Input/Output Data				
Rated AC Input/Output Active Power (W)	30000	40000	50000	60000
Max. AC Input/Output Apparent Power (VA)	30000	40000	50000	60000
Rated AC Input/Output Current (A)	36.2	48.2	60.2	72.3
Max. AC Input/Output Current (A)	36.2	48.2	60.2	72.3
Max. Three-phase Unbalanced Output Current (A)	50	60	70	83.3
Max. Continuous AC Passthrough (grid to load) (A)	200			
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)	277/480V 0.85Un-1.1Un			
Rated Input/Output Grid Frequency/Range(Hz)	60/55-65			
Grid Connection Form	3L+N+PE			
Total Current Harmonic Distortion THDi	<3% (of nominal power)			
DC Injection Current	<0.5% In			
Efficiency				
Max. Efficiency	97.60%			
Euro Efficiency	97.0%			
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)	≤65			
Ingress Protection(IP) Rating	TYPE3R			
Inverter Topology	Non-Isolated			
Over Voltage Category	OVC II(DC), OVC IV(AC)			
Cabinet Size (WxHxD mm)	527×894×294 (Excluding Connectors and Brackets)			
Weight (kg)	80			
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			

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