

Hybrid Inverter (IP54)



6kW-48V

SP HYBRID



Product Features



High Efficiency

MPP Tracking Efficiency: 99.9%

Battery Mode Conversion Efficiency: 93%



Powerful Performance

150% Overload Capacity (10s)

200% Overload Capacity (5s)

Input Overvoltage Protection till 380V



Intelligent Load Recognition

Adapts to Appliances with Sudden Power Changes such as AC, Water Pumps, and Refrigerators without Manual Adjustments



Solid Quality & Service

IP54 Protection for Anti-Dust and Water Design
3-Year Replacement

5-Year Service Warranty

Model	IPV-6K48U
Efficiency	
MPPT Tracking Efficiency	99.9%
Max. Battery Mode Conversion Efficiency	93%
PV Input	
Max. PV Input Power	6000W
Max. PV Input Voltage	500V
Start-Up Voltage	75V
MPPT Voltage Range	85V~450V
Max. Input Current	27A
Max. PV Isc	34A
Number of MPPT Trackers	1
AC Input	
Max. Grid Input Voltage (Absolute Maximum Ratings)	>380VAC
Input Voltage Range	90~280VAC
Maximum AC Input Current	50A
Nominal Operating Frequency	50/60Hz
AC Output	
Nominal AC Output Power	6000W
Max. Output Apparent Power	6000VA
Nominal AC Output Voltage	220/230/240VAC
Total Voltage Harmonic Distortion	>3%
Nominal AC Output Current	27.3A
Max. AC Output Current	54.6A (5 Seconds)
Nominal AC Frequency	50/60Hz
Switch Time	10ms
Surge Power	12000VA
Load Capacity of Motor	5HP
Overload Capacity	10s@110%~150% Load 5s@150%~200% Load
Battery	
Battery Type	Lead-acid/Li-ion/User Defined
Rated Battery Voltage	48VDC
Battery Voltage Range	40V~60V
Max. MPPT Charging Current	120A
Max.Mains/Generator Charging Current	120A
Max. Battery Discharging Current	130A
General	
Dimensions D*W*H	120*346.6*444.7mm
Net Weight	15kg
Operating Temperature Range	-10~+55°C, >45°C Power Derating
Max. Operating Altitude	4000m, >2000m Power Derating
Communication	WIFI/RS485(BMS)/Dry Contact/RS232
Diesel Generator Support	Yes, External ATS
Smart Load	Yes,External Contactor
Number of Parallel	12
Cooling Method	Intelligent Fan Cooling
Noise	<60dB
Authentication Level	IEC62109-1, IEC62109-2, IEC61683
Protection	
Ingress Protection	IP54
Overvoltage Protection	Yes
Overload Protection	Yes
Short Circuit Protection	Yes
Over Temperature Protection	Yes
Surge Protection	DC: TypeIII, AC: TypeIII