

IPV-8K48U | IPV-12K48U

Hybrid Inverter IP54



8~12kW | SP-HYBRID



Dual Output

Support Smart Load and Main Load



High PV Input Power

Up to 16kW PV Input Power
Max. MPPT Charging Current up to 160/210A



High Efficiency

MPP Tracking Efficiency $\geq 99.5\%$
Battery Mode Conversion Efficiency $\geq 95\%$



Powerful Performance

105%-150% Overload Capacity@10S
150%-200% Overload Capacity@5S
Max Grid Input Voltage 380V



Solid Quality & Service

IP54 Protection Design for Anti-Dust and Waterproof
3-Year Replacement
5-Year Service Warranty

Model	IPV-8K48U	IPV-12K48U
Efficiency		
MPPT Tracking Efficiency	99.5%	
Max. Battery Mode Conversion Efficiency	93%	95%
PV Input		
Max. PV Input Power	16000W	
Max. PV Input Voltage	500V	
Start-Up Voltage	75V	
MPPT Voltage Range	85V~450V	
Max. Input Current	30A+15A	27A+27A
MPP Trackers	2	
AC Input		
Max. Grid Input Voltage	380Vrms	
Nominal Voltage(Optional)	220VAC/230VAC/240VAC	
Input Voltage Range	90VAC-280VAC	
Max. AC Input Current	36.4A(Bypass Mode)	90A(Bypass Mode)
Nominal Operating Frequency	50/60Hz	
THDi	<3%	
AC Output		
Nominal AC Output Power	8kW	12kW
Max. Output Apparent Power	8kVA	12kVA
Nominal AC Output Voltage(Optional)	220VAC/230VAC/240VAC	
Output Voltage Range	175VAC-280VAC(UPS Mode) 90VAC-280VAC(APL Mode)	
Total Voltage Harmonic Distortion	<3%	
Nominal AC Frequency	50Hz	
Switch Time	10ms(UPS);20ms(Applicances)	
Surge Power	16kW@5S	24kW@5S
Overload Capacity	105%-150%@10S,150%-200%@5S	
Battery		
Battery Type	Lead-acid/Lithium-ion/User Defined	
Rated Voltage	48V	
Battery Voltage Range	40-60V	
Max. MPPT Charging Current	160A	210A
Max. Mains/Generator Charging Current	160A	210A
Max. Discharging Current	180A	250A
General		
Dimensions (L×W×H) mm	420 × 125 × 520 mm	525 × 125 × 630 mm
Net Weight	20kg	28.5kg
Operating Temperature Range	-10°C-55°C,>45°C Power Derating	
Max. Operating Altitude	4000m,>2000m Power Derating	
Communication	WIFI/RS485/CAN/RS232/Dry Contact	
Diesel Generator Support	Yes	
Smart Load Support	Yes	
Number of Parallel	Single Phase:9 Three Phase:12	Single Phase:6 Three Phase:12
Cooling Method	Intelligent Fan Cooling	
Noise	<55dB(PV Connected) <45dB(No PV Connected)	<60dB
Authentication Level	IEC62109-1,IEC62109-2,IEC61683	
Protection		
Ingress Protection	IP54	
Overvoltage Protection	Yes	
Overload Protection	Yes	
Short Circuit Protection	Yes	
Over Temperature	Yes	
Surge Protection	DC: Type III, AC: Type III	