EPEVER
EPSOLAR TECHNOLOGY

IPower series
Pure Sine Wave Inverter

Overview

IPower series is a kind of pure sine wave inverter which can convert. 12/24/48VDC to 220/230VAC(or 110/120VAC). Industrial design, compared with the civil design, has a wider operating temperature, easy installation and operation. The wide input voltage range is ideal for solar system application. The inverter can be applied in many fields, such as household emergency lighting system, vehicle mounted system and small field power supply etc.

Features

- Safe design with input and output electrical isolation
- Adoption of advanced SPWM technology, pure sine wave output
- Optional output voltage 220/230VAC(or 110/120VAC), choosing by DIP switch
- LED indicators for fault status and working status
- Lower No-load consumption
- Max. efficiency up to 95%(IP2000-22, IP2000-42)①
- Input protection: Over voltage protection, low voltage protection
- Output protection: Over load protection, short circuit protection
- Over temperature protection: Temperature-controlled Fan Ventilation; Inverter turns off automatically when overheating
- Operational USB output 5VDC/1A
- Operational RS485 communication port②

The efficiency is tested at rated input voltage,220V output with resistive load, 25 Ambient temperature,1500W and higher version
1000W and higher version support RS485 communication port optional.

Technical Specifications

Model	IP350-12	IP350-22	IP350-11	IP350-21	IP500-12	IP500-22	IP500-11	IP500-21
Technical Specification								
Rated Input Voltage	12VDC	24VDC	12VDC	24VDC	12VDC	24VDC	12VDC	24VDC
Input Voltage Range	10.8 ~ 16VDC	21.6 ~ 32VDC	10.8 ~ 16VDC	21.6 ~ 32VDC	10.8 ~ 16VDC	21.6 ~ 32VDC	10.8 ~ 16VDC	21.6 ~ 32VDC
Input surge voltage	< 32VDC	< 44VDC	< 32VDC	< 44VDC	< 32VDC	< 44VDC	< 32VDC	< 44VDC
Output Voltage	220VAC (± 5%) 230VAC (-7% ~ + 5%)		110VAC (± 5%) 20VAC (-10% ~ + 5%)		220VAC (± 5%) 230VAC (-10% ~ + 5%)		110VAC (± 5%) 120VAC (-10% ~ + 5%)	
Output Frequency	50/60±0.1Hz							
Output Continuous Power	280W				400W			
Output Power 15 min.	350W				500W			
Surge power	750W				1000W			
Power factor	0.2-1(VA lower than output continuous power)							
Output Wave	Pure sine wave							
Distortion THD	THD≤3%①		THD≤5%①		THD≤3%①		THD≤5%①	
Max. Efficiency	91%	92%	90%	91%	92%		91%	
No-load current	<0.7A	<0.5A	<0.7A	<0.5A	<0.9A	<0.5A	<0.9A	<0.5A
USB Output Port②	5VDC/Max.1A							
Binding post	Φ6mm				Φ6mm			
Overall dimension	214 × 105.5 × 57.7mm				232.2 × 132 × 74.5mm			
Mounting dimension	185.5 × 76.7mm				205 × 102 mm			
Mounting hole size	Φ4.2mm				Φ5.2mm			
Net weight	1.0kg				1.7 kg			

Model	IP1000-12	IP1000-22	IP1000-11	IP1000-21	IP1500-12	IP1500-22	IP1500-11	IP1500-21
Technical Specification								
Rated Input Voltage	12VDC	24VDC	12VDC	24VDC	12VDC	24VDC	12VDC	24VDC
Input Voltage Range	10.8 ~ 16VDC	21.6 ~ 32VDC	10.8 ~ 16VDC	21.6 ~ 32VDC	10.8 ~ 16VDC	21.6 ~ 32VDC	10.8 ~ 16VDC	21.6 ~ 32VDC
Input Surge Voltage	<20VDC	<40VDC	<20VDC	<44VDC	<20VDC	<40VDC	<20VDC	<40VDC
Output Voltage	220VAC / 230VAC (± 5%)		110VAC / 120VAC (± 3%)		220VAC (± 5%) 230VAC (-7% ~ + 5%)		110VAC (± 3%) 120VAC (-7% ~ + 3%)	
Output Frequency	50/60±0.1Hz							
Output Continuous Power	800W				1200W			
Output Power 15 min.	1000W				1500W			
Surge power	1600W				2400W			
Power factor	0.2-1(VA lower than output continuous power)							
Output Wave	Pure sine wave							
Distortion THD	THD≤3%①		THD≤5%①		THD≤3%①		THD≤5%①	
Max. Efficiency	94.5%		92.5%		93%	94%	93%	94%
No-load Current	<0.8A	<0.5A	<0.8A	<0.5A	<1.0A	<0.6A	<1.0A	<0.6A
USB Output Port②	5VDC/Max.1A							
RS485 Com. Port②	5VDC / 200mA							
Binding Post	Φ10mm							
Overall Dimension (mm)	298.3 × 231.5 × 98.5	284.7 × 231.5 × 98.5	298.3 × 231.5 × 98.5	284.7 × 231.5 × 98.5	326,12×231.5 ×98.5	284.7×231.5 ×98.5	326,12×231.5 ×98.5	284.7×231.5 ×98.5
Mounting Dimension	183 × 220 mm	163 × 219.5mm	183 × 220 mm	163 × 219.5mm	208 × 220 mm	163 × 219.5mm	208 × 220 mm	163 × 219.5mm
Mounting Hole Size	Φ5.5mm							
Net Weight	3.9 kg	3.6 kg	3.9 kg	3.6 kg	4.6 kg	3.9 kg	4.6 kg	3.9 kg

Environmental Parameters

Working Temperature	-20 ℃ ~ + 45 ℃
Storage Temperature	-35 ℃ ~ + 70 ℃
Humidity	<95% (NC)
Enclosure	IP20
Altitude	< 5000 m (Derating to operate according to IEC62040 at a height exceeding 1000m)

Model	IP2000-22	IP2000-42	IP2000-21	IP2000-41
Technical Specification				
Rated Input Voltage	24VDC	48VDC	24VDC	48VDC
Input Voltage Range	21.6 ~ 32VDC	43.2 ~ 60 VDC	21.6 ~ 32VDC	43.2 ~ 60 VDC
Input Surge Voltage	<40VDC	<80VDC	<40VDC	<80VDC
Output Voltage	220VAC (± 5%) 230VAC (-10% ~ + 5%)		110VAC (± 5%) 120VAC (-10% ~ + 5%)	
Output Frequency	50/60±0.1Hz			
Output Continuous Power	1600W			
Output Power 15 min.	2000W			
Surge power	3200W			
Power factor	0.2-1(VA lower than output continuous power)			
Output Wave	Pure sine wave			
Distortion THD	THD≤3%①		THD≤5%①	
Max. Efficiency	95%		94%	
No-load Current	<0.6A	<0.4A	<0.6A	<0.4A
USB Output Port②	5VDC/Max.1A			
RS485 Com. Port②	5VDC / 200mA			
Binding Post	Φ10mm			
Overall Dimension	326.12 × 231.5 × 98.5mm			
Mounting Dimension	208 × 219.5mm			
Mounting Hole Size	Φ5.5mm			
Net Weight	4.6 kg			

①Test condition: Rated Input Voltage, Output Continuous Power, Resistive load.
②Conventional products don't have this port; the port is optional.

Others

Dielectric Strength	Between DC input terminals and metal case: Test voltage AC500V, 1 minute Between AC output terminals and metal case: Test voltage AC1500V, 1 minute

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