

### Overview

IPower Plus is a new series of pure sine wave inverter which compatible with the lithium battery system. This new inverter with the input surge current suppression technology, which effectively prevents the damage of surge current to lithium battery cell and BMS (Battery Management System). Also, the smart voltage and current double closed-loop control algorism bring the inverter a faster response and better resistance to load impact. The internal of the inverter uses high quality and high power density of the components to provide the stable, reliable, and sufficient power output for long time use. The optional communication solution allows people to monitor the operational status in real-time or change the parameters at any place.

The equipment fits multiple areas where need DC to AC, such as solar AC power system, vehicle system, RV power supply, security monitoring system, emergency lighting system, field power system, household power system, etc. The inverter with the EMC (Electro Magnetic Compatibility) characteristic is also available for higher power quality required place.



### Features

- The input and output adopt completely isolated design
- Smart voltage and current double closed-loop control bring a faster response and better reliability.
- EMC characteristic which widely applied to higher quality requirement power system.
- Adoption of advanced SPWM technology and pure sine wave output
- Input surge current suppression technology to support the lithium battery system.
- Resistance to load impact supports impact loads (Air conditioner, Washing machine, Refrigerator, etc.)
- High power density and High-quality components to ensure reliability.
- Output power factor up to 1
- Low loss of no-load and standby.
- Low THD (Total Harmonic Distortion)
- High conversion efficiency.
- Extensive protection: input reverse polarity, input overvoltage, input low voltage, output overload, and short circuit, overheating.
- Air cooling control by dual condition (Temperature and Load)
- 180 degree rotatable LCD design to simplify the system wiring
- One-click control of operational status
- Friendly LCD design to simply monitor and parameter configure
- Supports phone Apps and PC software remote control
- Output voltage 220/230VAC and frequency 50/60Hz optional
- USB ports to power DC fans, and other electronic equipments or charge phones.
- RS485 communication port supports multiple optional accessories.
- External switch contact design to allow remote control
- IEC62109, EN61000, RoHS approved



## Technical Specifications

Item	IP1500-12-Plus(T)	IP2000-12-Plus(T)	IP2000-22-Plus(T)	IP2000-42-Plus(T)	IP3000-12-Plus(T)
Output continuous power	1500W@35℃@ Rated input voltage	2000W@35℃@ Rated input voltage			3000W@35℃@ Rated input voltage
Surge power	3000W@5S	4000W@5S			6000W@5S
Output voltage	220VAC(±3%);230VAC(-7%~+3%)				
Output frequency	50/60Hz±0.2%				
Output wave	Pure Sine Wave				
Output distortion THD	THD≤3%(Resistive load)				
Load power factor	0.2~1(VA≤Continuous output power)				
Rated input voltage	12VDC	12VDC	24VDC	48VDC	12VDC
Input voltage range	10.8~16VDC	10.8~16VDC	21.6~32VDC	43.2~64VDC	10.8~16VDC
Rated output power efficiency <sup>①</sup>	>89%	>88%	>91%	>92.5%	>87%
Max. efficiency <sup>②</sup>	>93%(30% load)	>94%(30% load)	>93%(30% load)	>94.5%(30% load)	>94%(30% load)
Self-consumption	<0.2A				
No-load current	<1.4A@12V	<1.2A	<1.0A	<0.5A	<1.6A
RS485 com. port	5VDC/200mA				
Input terminal	M6	M10	M6	M6	M10
Overall dimension (L*W*H)	387×231.5×123mm	421×213.5×123mm			557×231.5×123mm
Mounting dimension	361×145mm	395×145mm			532×145mm
Mounting hole size	Φ6mm				
Weight	6kg	8kg	6.5kg	6.5kg	10.5kg
Working Temperature	-20℃~+50℃(Refer to the Reduced capacity curve)				
Storage Temperature	-35℃~+70℃				
Humidity	≤95%(N.C.)				
Enclosure	IP20				
Altitude	<5000m(Derating to operate according to IEC62040 at a height exceeding 1000m)				

①Load power is continuous output power when the DC input is the rated voltage (25℃)

②This efficiency is referred to the max. power when connected with different load under the rated DC input voltage.

Let the sun provide you with energy