

IPower-Plus series Pure Sine Wave Inverter

Overview

IPower-Plus is a high-frequency pure sine wave inverter that can convert 12/24/48VDC to 220/230V AC (or110V/120V AC) and power the AC loads. It is designed according to the international standard with higher quality, reliability, and safety. Raning from 500W to 5000W, Ipower-Plus is compatible with lithium-ion battery perfectly and suits any situation of DC to AC, such as RVs. boats, residentials, and places where require high quality of electrical power.

Features

- Pure sine wave output
- Input to output electrical isolation
- Digital dual closed-loop control of voltage and current
- Input surge current suppression for lithium battery systems
- Output power factor up to 1
- Simple system wiring & 180 degrees rotating LCD
- Input Protection: Reverse polarity, Low-voltage, Over-voltage
- Output Protection: Overload, Short circuit, Overheating
- Phone and PC remote control through RS485 port
- Extra external switch port
- Safety (EN/IEC62109) & EMC approved by international standards















Technical Specifications



Parameters	IP500-11-Plus	IP500-21-Plus	IP1000-11-Plus	IP1000-21-Plus	IP1500-11-Plus	IP1500-21-Plus	IP1500-41-Plus			
Continuous output power	500W	500W	1000W	1000W	1500W	1500W	1500W			
Surge power	1000W@5S	1000W@5S	2000W@5S	2000W@5S	3000W@5S	3000W@5S	3000W@5S			
Surge current when power on	< 50A	< 50A	<100A	<100A	< 100A	< 100A	< 50A			
Output voltage	110VAC(±3%); 120VAC(-7%~+3%)									
Output frequency	50/60Hz±0.2%									
Output wave	Pure sine wave									
Output distortion THD	THD≤4% (Resistive load)	THD≤4% (Resistive load)	THD≤4% (Resistive load)	THD≤3% (Resistive load)	THD≤4% (Resistive load)	THD≤4% (Resistive load)	THD≤4% (Resistive load)			
Load power factor	0.2-1(Load VA ≤ Continuous output power)									
Rated input voltage	12VDC	24VDC	12VDC	24VDC	12VDC	24VDC	48VDC			
Input voltage range	10.8~16.0VDC	21.6~32VDC	10.8~16.0VDC	21.6~32.0VDC	10.8~16.0VDC	21.6~32.0VDC	43.2~64.0VDC			
Rated output efficiency	> 87.5%	> 90%	> 87%	> 90%	>88%	> 88%	> 90%			
Max. output efficiency	> 90% (40% loads)	> 91% (40% loads)	> 92% (40% loads)	> 92.5% (30% loads)	> 93% (30% loads)	> 92.5% (30% loads)	> 92% (30% loads)			
No-load current	< 0.8A	< 0.5A	<0.8A	< 0.6A	< 1.0A	< 0.9A	< 0.5A			
USB output	5VDC/Max.1A	5VDC/Max.1A	5VDC/Max.1A	5VDC/Max.1A	5VDC/Max.1A	5VDC/Max.1A	/			
RS485 com. port	5VDC/200mA	5VDC/200mA	5VDC/200mA	5VDC/200mA	5VDC/200mA	5VDC/200mA	5VDC/200mA			
Dimension(LxWxH)	286×163.5×78mm	286×163.5×78mm	371×231.5×123mm	371×231.5×123mm	387×231.5×123mm	387×231.5×123mm	387×231.5×123mm			
Mounting dimension	262×75mm	262×75mm	345×145mm	345×145mm	361×145mm	361×145mm	361×145mm			
Net Weight	2.2kg	2.2kg	5.8kg	5kg	6kg	6kg	6kg			
Operating temperature range	`-20°C~+60°C(Refer to the derating curve)									
Relative humidity	< 95%(N.C.)									
Enclosure	IP20									

Technical Specifications



Parameters	IP2000-11-Plus	IP2000-21-Plus	IP2000-41-Plus	IP3000-11-Plus	IP3000-21-Plus	IP3000-41-Plus	IP4000-41-Plus			
Continuous output power	2000W	2000W	2000W	3000W	3000W	3000W	4000W			
Surge power	4000W@55	4000W@5S	4000W@5S	4800W@1S	6000W@5S	6000W@5S	8000W@5S			
Surge current when power on	< 100A	< 100A	< 50A	< 100A	< 100A	< 65A	<65A			
Output voltage	110VAC(±3%); 120VAC(-7%~+3%)									
Output frequency	50/60Hz±0.2%									
Output wave	Pure sine wave									
Output distortion THD	THD≤5% (Resistive load)	THD≤4% (Resistive load)	THD≤4% (Resistive load)	THD≤4% (Resistive load)	THD≤5% (Resistive load)	THD≤4% (Resistive load)	THD≤4% (Resistive load)			
Load power factor	0.2-1(Load VA ≤ Continuous output power)									
Rated input voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC	48VDC			
Input voltage range	10.8~16.0VDC	21.6~32.0VDC	43.2~64.0VDC	10.8~16.0VDC	21.6 ~ 32.0VDC	43.2~64.0VDC	43.2~64VDC			
Rated output efficiency	>85%	> 88%	> 88%	> 85%	> 87%	>89.5%	>88%			
Max. output efficiency	> 92% (30% loads)	> 92% (30% loads)	> 93% (30% loads)	> 93% (30% loads)	> 91.5% (30% loads)	> 93.5% (30% loads)	> 93% (30% loads)			
No-load current	<1.2A	< 0.9A	< 0.5A	<1.6A	<1A	< 0.4A	< 0.6A			
USB output	5VDC/Max.1A	5VDC/Max.1A	5VDC/Max.1A	5VDC/Max.1A	5VDC/Max.1A	/	/			
RS485 com. port	5VDC/ 200mA	5VDC/200mA	5VDC/ 200mA							
Dimension(LxWxH)	420×231.5×123mm	421×231.5×123mm	421×231.5×123mm	550×274×148mm	521×274×148mm	516x231.5x123mm	521×274×148mm			
Mounting dimension	395×145mm	395×145mm	395×145mm	525×145mm	495×145mm	490x145mm	495×145mm			
Net Weight	8kg	6.5kg	6.5kg	13kg	8kg	8kg	12kg			
Operating temperature range	`-20°C~+60°C(Refer to the derating curve)									
Relative humidity	< 95%(N.C.)									
Enclosure	IP20									