EPEVER
EPSOLAR TECHNOLOGY

IPower Plus series
Pure Sine Wave Inverter

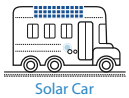
Overview

IPower-Plus is a high-frequency pure sine wave inverter which adopts digital intelligent control technology. The inverter brings lower inrush current of input, faster dynamic response, better impact resistance from load, more reliable of operation, also supports lithium batteries. This product fits any situation of DC to AC, such as RVs, boats, residentials, and places where require high quality of electrical power.



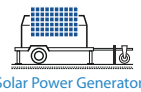
Features

- 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


Solar Car


Solar Home


Solar Boat


Solar Power Generator

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@35℃@Rated input voltage	500W@35℃@Rated input voltage	1000W@35℃ @Rated input voltage	1000W@35℃@Rated input voltage	1500W@35℃@Rated input voltage	1500W@35℃@Rated input voltage	1500W@35℃@Rated input voltage
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%)			110VAC(±3%); 120VAC(-7%~+3%)			
Output frequency	50/60Hz±0.2%			50/60Hz±0.2%			
Output wave	Pure Sine 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(VA≤continuous output power)			0.2~1(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 efficiency①	＞87.5%	＞90%	＞87%	＞90%	＞88%	＞88%	＞90%
Max. output efficiency②	＞90% (40% loads)	＞91% (40% loads)	＞92% (40% loads)	＞92.5% (30% loads)	＞93%(30% loads)	＞92.5%(30% loads)	＞92%(30% loads)
Idle current	＜0.2A	＜0.15A	＜0.2A	＜0.2A	＜0.2A	＜0.2A	＜0.2A
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			/
RS485 com. port	5VDC/200mA			5VDC/200mA			
Input terminal	M6			M6			
Dimension	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
Mounting Holes	Φ5mm	Φ5mm	Φ6mm	Φ6mm	Φ6mm	Φ6mm	Φ6mm
Net Weight	2.2kg	2.2kg	5.8kg	5kg	6kg	6kg	6kg
Working temperature	·-20℃~+60℃(Refer to the Reduced capacity curve)			·-20℃~+60℃(Refer to the Reduced capacity curve)			
Relative humidity	< 95%(N.C.)			< 95%(N.C.)			
Enclosure	IP20			IP20			

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@35℃@ Rated input voltage	2000W@35℃@Rated input voltage	2000W@35℃ @Rated input voltage	3000W@35℃@Rated input voltage			4000W@35℃@Rated input voltage
Surge power	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%)			110VAC(±3%); 120VAC(-7%~+3%)			
Output frequency	50/60Hz±0.2%			50/60Hz±0.2%			
Output wave	Pure Sine Wave			Pure Sine Wave			
Output distortion THD	THD≤5%(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(VA≤ output continuous power)			0.2~1(VA≤output continuous 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 efficiency①	＞85%	＞88%	＞88%	＞85%	＞87%	＞89.5%	＞88%
Max. output efficiency②	＞92% (30% loads)	＞92%(30% loads)	＞93% (30% loads)	＞93% (30% loads)	＞91.5% (30% loads)	＞93.5% (30% loads)	＞93%(30% loads)
Idle current	＜0.2A			＜0.2A			
No-load current	＜1.2A	＜0.9A	＜0.5A	＜1.6A	＜1A	＜0.4A	＜0.6A
USB output	5VDC/Max.1A			5VDC/Max.1A		/	/
RS485 com. port	5VDC/ 200mA	5VDC/200mA	5VDC/ 200mA	5VDC/ 200mA			
Input terminal	M10	M6	M6	M10	M6	M6	M6
Dimension	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
Mounting Holes	Φ6mm			Φ6mm			
Net Weight	8kg	6.5kg	6.5kg	13kg	8kg	8kg	12kg
Working temperature	-20℃~+60℃(Refer to the Reduced capacity curve)			-20℃~+60℃(Refer to the Reduced capacity curve)			
Relative humidity	< 95%(N.C.)			< 95%(N.C.)			
Enclosure	IP20			IP20			

Parameters	IP500-12-Plus	IP500-22-Plus	IP1000-12-Plus	IP1000-22-Plus	IP1500-12-Plus	IP1500-22-Plus	IP1500-42-Plus
Continuous output power	500W@35℃@Rated input voltage		1000W@35℃ @Rated input voltage	1000W@35℃@Rated input voltage	1500W@35℃@Rated input voltage		
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	220VAC(±3%); 230VAC(-7%~+3%)			220VAC(±3%); 230VAC(-7%~+3%)			
Output frequency	50/60Hz±0.2%			50/60Hz±0.2%			
Output wave	Pure Sine Wave			Pure Sine Wave			
Output distortion THD	THD≤3%(Resistive load)			THD≤3%(Resistive load)			
Load power factor	0.2~1(VA≤continuous output power)			0.2~1(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 efficiency①	＞89.5%	＞91.5%	＞89%	＞90%	＞89%	＞90%	＞92.5%
Max. output efficiency②	＞90% (40% loads)	＞92% (40% loads)	＞93% (40% loads)	＞93% (30% loads)	＞93%(30% loads)	＞93.5%(30% loads)	＞94%(30% loads)
Idle current	＜0.2A	＜0.15A	＜0.2A	＜0.2A	＜0.2A	＜0.2A	＜0.2A
No-load current	＜0.9A	＜0.6A	＜1.1A	＜0.9A	＜1.2A	＜0.9A	＜0.5A
USB output	5VDC/Max.1A			5VDC/Max.1A			/
RS485 com. port	5VDC/200mA			5VDC/200mA			
Input terminal	M6			M6			
Dimension	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
Mounting Holes	Φ5mm	Φ5mm	Φ6mm	Φ6mm			
Net Weight	2.2kg	2.2kg	5.8kg	5kg	6kg	6kg	6kg
Working temperature	-20℃~+60℃(Refer to the Reduced capacity curve)			-20℃~+60℃(Refer to the Reduced capacity curve)			
Relative humidity	< 95%(N.C.)			< 95%(N.C.)			
Enclosure	IP20			IP20			

Parameters	IP2000-12-Plus	IP2000-22-Plus	IP2000-42-Plus	IP3000-12-Plus	IP3000-22-Plus	IP3000-42-Plus	IP4000-42-Plus	IP5000-42-Plus
Continuous output power	2000W@35℃@ Rated input voltage			3000W@35℃ @Rated input voltage	3000W@35℃@Rated input voltage		4000W@35℃@Rated input voltage	5000W@35℃@Rated input voltage
Surge power	4000W@5S			6000W@5S	6000W@5S	6000W@5S	8000W@5S	8000W@5S
Surge current when power on	＜100A	＜100A	＜50A	＜100A	＜100A	＜65A	＜65A	＜65A
Output voltage	220VAC(±3%); 230VAC(-7%~+3%)				220VAC(±3%)；230VAC(-7%~+3%)			
Output frequency	50/60Hz±0.2%				50/60Hz±0.2%			
Output wave	Pure Sine Wave				Pure Sine Wave			
Output distortion THD	THD≤3%(Resistive load)				THD≤3%(Resistive load)			
Load power factor	0.2~1(VA≤ output continuous power)				0.2~1(VA≤output continuous pow er)			
Rated input voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC	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	43.2~64.0VDC
Rated output efficiency①	＞88%	＞91%	＞92.5%	＞87%	＞90%	＞92.5%	＞91%	＞91%
Max. output efficiency②	＞94%(30% loads)	＞93%(30% loads)	＞94.5% (30% loads)	＞94% (30% loads)	＞94% (30% loads)	＞94.5% (30% loads)	＞94%(30% loads)	＞94%(30% loads)
Idle current	＜0.2A				＜0.2A			
No-load current	＜1.2A	＜1.0A	＜0.5A	＜1.6A	＜1A	＜0.5A	＜0.6A	＜0.8A
USB output	5VDC/Max.1A	5VDC/ Max.1A	/	5VDC/Max.1A	5VDC/Max.1A	/	/	/
RS485 com. port	5VDC/ 200mA				5VDC/ 200mA			
Input terminal	M10	M6	M6	M10	M6			
Dimension	420×231.5×123mm	421×231.5×123mm	421×231.5×123mm	557×231.5×123mm	521×274×148mm	491×231.5×123mm	516×231.5×123mm	531×231.5×123mm
Mounting dimension	395×145mm	395×145mm	395×145mm	532×145mm	495×145mm	465×145mm	490×145mm	505×145mm
Mounting Holes	Φ6mm				Φ6mm			
Net Weight	8kg	6.5kg	6.5kg	10.5kg	8kg	7kg	8kg	9kg
Working temperature	-20℃~+60℃(Refer to the Reduced capacity curve)				-20℃~+60℃(Refer to the Reduced capacity curve)			
Relative humidity	< 95%(N.C.)				< 95%(N.C.)			
Enclosure	IP20				IP20			