

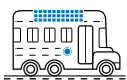
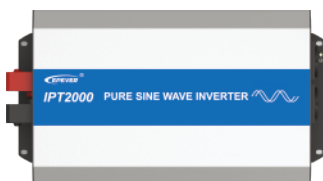
Overview

The IPT series, a high-frequency sine wave inverter, adopts a fully digital intelligent design and voltage-current dual closed-loop control algorithm. Featured with fast response, high conversion efficiency, low Total Harmonic Distortion (THD), and high reliability running, the IPT series can be widely used in the DC-AC off-grid systems (such as vehicle systems, security monitoring systems, emergency lighting systems, household power systems, field power systems, and other systems requiring higher power quality).

Features

- Pure sine wave output
- Input to output electrical isolation
- Output power factor up to 1
- Input Protection: Low-voltage, Over-voltage
- Output Protection: Overload, Short circuit, Overheating
- RS485 com. port to realize remote monitoring①
- External switch design, matched with EPEVER products, to expand inverter control function and reduce power consumption
- Diversified AC output sockets
- EN/IEC62109-1/2, EN61000-6-2/4, and FCC approved

① For inverters with 12V/24V input voltage, the RS485/RJ11 port has NO communication isolation design. This function (communication isolation design) is just for inverters with 48V input voltage.



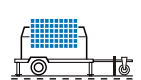
Solar Car



Solar Home



Solar Boat



Solar Power Generator

Parameter	IPT350-12	IPT350-22	IPT500-12	IPT500-22	IPT1000-12	IPT1000-22	IPT1000-42
Continuous output power	350W@35°C@ Rated input voltage		500W@35°C@Rated input voltage		1000W@35°C@Rated input voltage		
Surge power	700W@5S		1000W@5S		2000W@5S		
Surge current when power on ^①	< 30A		< 50A		< 100A		< 35A
Output voltage	220VAC (±3%); 230VAC (-6%~+3%); 240VAC (-9%~+3%)				220VAC (±3%); 230VAC (-6%~+3%); 240VAC (-9%~+3%)		220VAC/230VAC/240VAC(±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 (Load power ≤ Continuous output power)				0.2 ~ 1 (Load power ≤ 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 ~ 32VDC	10.8 ~ 16.0VDC	21.6 ~ 32.0VDC	43.2 ~ 64.0VDC
Rated output efficiency ^②	> 89.0%	> 90.0%	> 89.5%	> 91.5%	> 89.0%	> 90.0%	> 92.0%
Max. output efficiency ^③	> 90.0% (70% loads)	> 91.5% (70% loads)	> 91.0% (40% loads)	> 92.0% (40% loads)	> 93.0% (40% loads)	> 93.0% (30% loads)	> 93.0% (40% loads)
Idle current	< 0.15A	< 0.10A	< 0.15A	< 0.10A	< 0.2A	< 0.15A	< 0.1A
No-load current	< 0.9A	< 0.4A	< 0.9A	< 0.6A	< 1.1A	< 0.9A	< 0.4A
RS485 com. port	5VDC/200mA				5VDC/200mA		
Mechanical parameters							
Input terminal	M6				M6		
Dimension (L x W x H)	229 × 160 × 73mm		286 × 160 × 73mm		371 × 228 × 118mm		332×228×118mm
Mounting size (L x W)	205 × 75mm		262 × 75mm		345 × 145mm		306×145mm
Mounting hole size	Φ5mm		Φ5mm		Φ6mm		Φ6mm
Net Weight	1.5kg		2.3kg		4.8kg		4.5Kg

- ① The "Surge current when power on" parameter is for the customized products with an anti-surge function (whose product model has "S"). For other products, the actual surge current prevails.
- ② It means the rated output efficiency when the load power equals the "continuous output power" under the rated DC input voltage.
- ③ It means the max. output efficiency when the inverter is connected with different loads under the rated DC input voltage.

Parameter	IPT1500-12	IPT1500-22	IPT1500-42	IPT2000-12	IPT2000-22	IPT2000-42
Continuous output power	1500W@35°C@Rated input voltage			2000W@35°C@Rated input voltage		
Surge power	3000W@5S			4000W@5S		
Surge current when power on ^①	< 100A	< 100A	< 50A	< 100A	< 100A	< 50A
Output voltage	220VAC (±3%); 230VAC (-6%~+3%); 240VAC (-9%~+3%)			220VAC (±3%); 230VAC (-6%~+3%); 240VAC (-9%~+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 (Load power ≤ Continuous output power)			0.2 ~ 1 (Load power ≤ Continuous output power)		
Rated input voltage	12VDC	24VDC	48VDC	12VDC	24VDC	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
Rated output efficiency ^②	> 89.0%	> 90.0%	> 92.5%	> 88.0%	> 90.0%	> 92.5%
Max. output efficiency ^③	> 93.0% (30% loads)	> 93.5% (30% loads)	> 94.0% (30% loads)	> 94.0% (30% loads)	> 93.0% (30% loads)	> 94.5% (30% loads)
Idle current	< 0.2A	< 0.15A	< 0.1A	< 0.2A	< 0.15A	< 0.1A
No-load current	< 1.2A	< 0.9A	< 0.5A	< 1.2A	< 1.0A	< 0.5A
RS485 com. port	5VDC/200mA			5VDC/200mA		
Mechanical parameters						
Input terminal	M6	M6	M6	M10	M6	
Dimension (L x W x H)	387 × 228 × 118mm	387 × 228 × 118mm	387 × 228 × 118mm	420 × 228 × 118mm	421 × 228 × 118mm	
Mounting size (L x W)	361 × 145mm	361 × 145mm	361 × 145mm	395 × 145mm	395 × 145mm	
Mounting hole size	Φ6mm	Φ6mm	Φ6mm	Φ6mm	Φ6mm	
Net Weight	6.0kg	5.5kg	5.2kg	7.0kg	5.8kg	

- ① The "Surge current when power on" parameter is for the customized products with an anti-surge function (whose product model has "S"). For other products, the actual surge current prevails.
- ② It means the rated output efficiency when the load power equals the "continuous output power" under the rated DC input voltage.
- ③ It means the max. output efficiency when the inverter is connected with different loads under the rated DC input voltage.

Technical Specifications

Parameter	IPT3000-12	IPT3000-22	IPT3000-42	IPT4000-42	IPT5000-42
Continuous output power	3000W@35°C@输入额定电压			4000W@35°C@输入额定电压	5000W@35°C@输入额定电压
Surge power	6000W@5S			8000W@5S	
Surge current when power on ^①	< 100A	< 100A	< 65A	< 65A	
Output voltage	220VAC (±3%); 230VAC (-6%~+3%); 240VAC (-9%~+3%)				
Output frequency	50/60Hz ± 0.2%				
Output wave	纯正弦波				
Output distortion THD	THD ≤ 3% (纯阻性负载)				
Load power factor	0.2 ~ 1 (负载功率 ≤ 持续输出功率)				
Rated input voltage	12VDC	24VDC	48VDC	48VDC	
Input voltage range	10.8 ~ 16.0VDC	21.6 ~ 32.0VDC	43.2 ~ 64.0VDC	43.2 ~ 64.0VDC	
Rated output efficiency ^②	> 87.0%	> 90.0%	> 92.5%	> 91.0%	
Max. output efficiency ^③	> 94.0% (30%负载)	> 94.0% (30%负载)	> 94.5% (30%负载)	> 94.0%(30%负载)	
Idle current	< 0.2A	< 0.15A	< 0.1A	< 0.1A	< 0.1A
No-load current	< 1.6A	< 1.0A	< 0.5A	< 0.6A	< 0.8A
RS485 com. port	5VDC/200mA				
Mechanical parameters					
Input terminal	M10	M6	M6	M6	M6
Dimension (L x W x H)	557 × 228 × 118mm	521 × 270 × 143mm	491 × 228 × 118mm	516 × 228 × 118mm	531 × 228 × 118mm
Mounting size (L x W)	532 × 145mm	495 × 145mm	465 × 145mm	490 × 145mm	505 × 145mm
Mounting hole size	Φ6mm				
Net Weight	9.5kg	8.5kg	6.8kg	7.8kg	8.5kg

① The "Surge current when power on" parameter is for the customized products with an anti-surge function (whose product model has "S").

For other products, the actual surge current prevails.

② It means the rated output efficiency when the load power equals the "continuous output power" under the rated DC input voltage.

③ It means the max. output efficiency when the inverter is connected with different loads under the rated DC input voltage.

Environment parameters		Certification	
Environment temperature	-20°C ~ +60°C (Refer to the Derating Curve)	Safety	EN/IEC62109-1, UL458 (Products with 12/24V input voltage support), CSA C22.2#107.1
Storage temperature	-35°C ~ +70°C	EMC(Electromagnetic compatibility)	EN61000-6-2/EN61000-6-4,FCC 47 CFR Part 15, Subpart A
Relative humidity	≤ 95% (N.C.)	RoHS	IEC62321-3-1
Enclosure	IP20	-	
Altitude	< 5000m (If the altitude exceeds 1000 meters, the rated power will be reduced according to IEC62040.)		