

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, this 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 monitoring
- 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



Technical Specifications

Parameter	IPT350-12	IPT350-22	IPT500-12	IPT500-22	IPT1000-12	IPT1000-22	IPT1500-12	IPT1500-22	IPT1500-42
Continuous output power	350W		500W		1000W		1500W		
Surge power	700W@5S		1000W@5S		2000W@5S		3000W@5S		
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 (Load power ≤ Continuous output power)				0.2 ~ 1 (Load power ≤ Continuous output power)				
Rated input voltage	12VDC	24VDC	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	10.8 ~ 16.0VDC	21.6 ~ 32.0VDC	43.2 ~ 64.0VDC
Rated output efficiency	> 89.0%	> 90.0%	> 89.5%	> 91.5%	> 89.0%	> 90.0%	> 89.0%	> 90.0%	> 92.5%
Max. output efficiency	> 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% (30% loads)	> 93.5% (30% loads)	> 94.0% (30% loads)
Idle current	< 0.15A	< 0.10A	< 0.15A	< 0.10A	< 0.2A	< 0.15A	< 0.2A	< 0.15A	< 0.1A
No-load current	< 0.9A	< 0.4A	< 0.9A	< 0.6A	< 1.1A	< 0.9A	< 1.2A	< 0.9A	< 0.5A
RS485 com. port	5VDC/200mA				5VDC/200mA				
Mechanical parameters									
Input terminal	M6		M6		M6		M6		
Dimension (L x W x H)	229 x 160 x 73mm		286 x 160 x 73mm		371 x 228 x 118mm		387 x 228 x 118mm		
Mounting size	205 x 75mm		262 x 75mm		345 x 145mm		361 x 145mm		
Mounting hole size	Φ5mm		Φ5mm		Φ6mm		Φ6mm		
Net Weight	1.5kg		2.3kg		4.8kg		5.8kg		
Environment parameters									
Working temperature	-20°C ~ +60°C (Refer to the Derating Curve)								
Storage temperature	-35 °C ~ +70 °C								
Relative humidity	≤ 95% (N.C.)								
Enclosure	IP20								
Altitude	< 5000m (If the altitude exceeds 1000 meters, the rated power will be reduced according to IEC62040.)								
AC output Interface*	 C China	 E Europe	 A Australia	 UK UK	 F France				

*For specific product sockets, please refer to the product manual

Technical Specifications

Parameter	IPT2000-12	IPT2000-22	IPT2000-42	IPT3000-12	IPT3000-22	IPT3000-42	IPT4000-42	IPT5000-42
Continuous output power	2000W			3000W			4000W	5000W
Surge power	4000W@5S			6000W@5S			8000W@5S	
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 (Load power ≤ Continuous output power)			0.2 ~ 1 (Load power ≤ 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 ~ 64.0VDC	
Rated output efficiency	> 88.0%	> 90.0%	> 92.5%	> 87.0%	> 90.0%	> 92.5%	> 91.0%	
Max. output efficiency	> 94.0% (30% loads)	> 93.0% (30% loads)	> 94.5% (30% loads)	> 94.0% (30% loads)	> 94.0% (30% loads)	> 94.5% (30% loads)	> 94.0%(30% loads)	
Idle current	< 0.2A	< 0.15A	< 0.1A	< 0.2A	< 0.15A	< 0.1A	< 0.1A	< 0.1A
No-load current	< 1.2A	< 1.0A	< 0.5A	< 1.6A	< 1.0A	< 0.5A	< 0.6A	< 0.8A
RS485 com. port	5VDC/200mA			5VDC/200mA				
Mechanical parameters								
Input terminal	M10	M6	M6	M10	M6	M6	M6	M6
Dimension (L x W x H)	420 x 228 x 118 mm	421 x 228 x 118 mm	421 x 228 x 118 mm	557 x 228 x 118 mm	521 x 270 x 143 mm	491 x 228 x 118 mm	516 x 228 x 118 mm	531 x 228 x 118 mm
Mounting size	395 x 145mm	395 x 145mm	395 x 145mm	532 x 145mm	495 x 145mm	465 x 145mm	490 x 145mm	505 x 145mm
Mounting hole size	Φ6mm	Φ6mm	Φ6mm	Φ6mm	Φ6mm	Φ6mm	Φ6mm	Φ6mm
Net Weight	7.8kg	6.5kg	6.5kg	10.0kg	8.5kg	7.0kg	8.0kg	9.0kg
Environment parameters								
Working temperature	-20°C ~ +60°C (Refer to the Derating Curve)							
Storage temperature	-35 °C ~ +70 °C							
Relative humidity	≤ 95% (N.C.)							
Enclosure	IP20							
Altitude	< 5000m (If the altitude exceeds 1000 meters, the rated power will be reduced according to IEC62040.)							
AC output Interface*	 C China	 E Europe	 A Australia	 UK UK	 F France			

*For specific product sockets, please refer to the product manual