

PSI-X3P100000-TPM

PSI-X3P SERIES | THREE PHASE INVERTER





More energy harvest

Maximum eciency up to 98.6% 180 ~ 1000Vdc MPPT voltage range Maximum 9 MPPTs, 2 strings per MPP tracker 150% PV oversizing input, 110% overloading output Maximum 32 A MPPT current

Safety & Reliability

IP66 protection level AC terminal temperature detection

Intelligence for easy maintenance and economy

Built-in export power control Remote setting and upgrading

- 24 hours operation monitoring
- Smart I-V Curve Diagnosis supported
- Night-time reactive power compensation
- Aluminium AC cable connection available
- Power line communication (Optional)
- Fuse free design with smart string current monitoring
- Smart air cooling technique results in long lifetime of fans
- Advanced heat dissipation technology makes the system more than 5% lighter and smaller

CE



DC Input PSI-X3P100000-TPM Max. PV array input power 150000 W Max. PV input voltage 1100 V Nominal input voltage 🗉 580 / 600 V Startup voltage 200 V MPP tracker voltage range 180 - 1000 V No. of MPP trackers 9 No. of Strings per MPP tracker 2 Max. PV input current per MPPT <u>32</u> A Isc PV Array Short Circuit current per MPPT 46 A

AC Output

Rated AC output power	100000 W	
Rated AC output current 🗅	151.6 A / 145 A	
Max. AC output apparent power	110000 VA	
Max. AC output current 🗅	166.7 A / 159.5 A	
Nominal AC voltage	220 A / 380 A, 230 A / 400 A, 3/N/PE, 3/PE	
AC voltage range (2)	304 ~ 480 V	
Nominal AC frequency / AC frequency range (2)	50, 60 Hz; ±5	
THDi (Rated power)	< 3 %	
Power factor range [cos φ]	0.8 leading - 0.8 lagging	

System Data

Max. efficiency	98.6%
European weighted efficiency	98.3 %
Ingress protection	IP66
Operating temperature range	-25°C ~ +60°C (derating above +45°C)
Max. operation altitude	4000 m (derating above 3000 m)
Relative humidity	0% ~ 100% without condensation
Dimensions (H x W x D)	985 x 660 x 327.5 mm
Weight	83 kg
Cooling concept	Smart fan cooling
Communication Interfaces	RS485 / USB / DRM
Monitoring Dongle	Wi-Fi (PSI-X-H-WIFI-3.0 module Optional) / LAN (PSI-X-H-ETH-3.0 module Optional)
Display	LED (4) / LCD (16x2)

Protection

Over/under voltage protection	Integrated
DC isolation protection	Integrated
Grid monitoring	Integrated
DC injection monitoring	Integrated
Residual current detection	Integrated
Anti-islanding protection	Integrated
String fault detection	Integrated
SPD	Type II Integrated (DC/AC)
AC terminals over temperature detection	Integrated

Certifications

For a complete list of certificates, please refer to www.peimar.com

1. The two data refer to dierent grid voltage 220V/230V or 500V/540V

2. The AC voltage and the frequency range may vary from dierent country codes

It is important to point out, that all technical specifications, information and figures contained in this datasheet are estimated values. Peimar reserves the right to change the technical specifications, information and figures contained in this document at any time without notice. EN_2025_02_00

