

220V THREE-PHASE ON-GRID PHOTOVOLTAIC SOLAR INVERTER

TSI-T20K2-220 / TSI-T25K2-220



PRODUCT FEATURES



EFFICIENT

- Multi-MPPT with a maximum efficiency of 98.6%.
- Compatible with all photovoltaic models available on the market.



RELIABLE

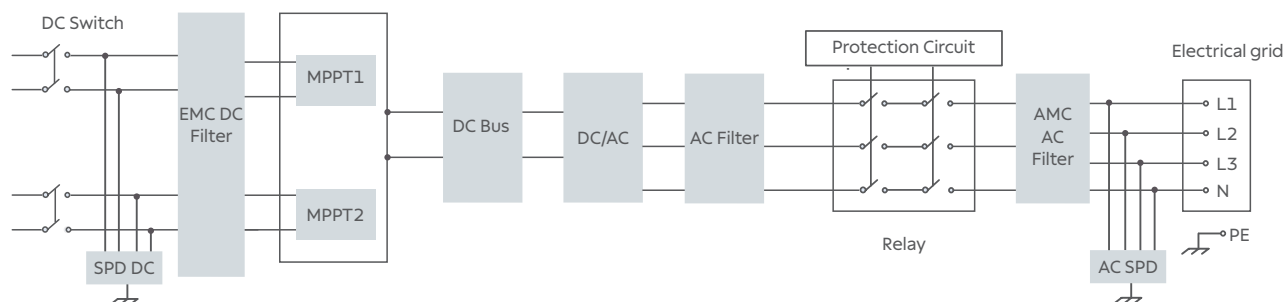
- Smart, high-precision string detection.
- Built in SPD for surge protection and AFCI function.
- Wide AC voltage range for unstable power grids.



EASY TO USE

- Integrated interface with zero-export function.
- Pre-configured for the Brazilian power grid code.
- 24/7 remote firmware monitoring and updating.
- Local commissioning via APP.

TOPOLOGICAL GRAPH



TECHNICAL DATA

Model	TSI-T20K2-220	TSI-T25K2-220
DC Input		
Maximum Recommended Input Power	30 kW	37.7 kW
Maximum Input Voltage	1100 VDC	
Starting Voltage	180 VDC	
MPPT Operating Range	200 ~1000 VDC	
Maximum Input Current per MPPT	45 A / 45 A	54 A / 54 A
Maximum Short Circuit Current	67.5 A / 67.5 A	81 A / 81 A
Number of DC Inputs	3 / 3	5 / 4
MPPT Number	2	
AC Output		
Rated Output Power	20 kW	25 kW
Maximum Output Power	20 kW	25 kW
Rated Output Voltage	127 VAC / 220 VAC (3P+N+PE)	
Operating Voltage Range	165~286 VAC	
Rated Output Current	52.3 A	65.6 A
Maximum Output Current	52.3 A	65.6 A
Rated Grid Frequency	60 Hz	
Power Factor	(0.8 inductive — 0.8 capacitive)	
Total Harmonic Distortion (THD)	<3% (in rated power)	
Efficiency		
Maximum Efficiency	98.6%	
European Standard Efficiency	98.3%	
Protection		
Photovoltaic Reverse Polarity Protection	Yes	
Insulation Resistance Testing	Yes	
Residual Leakage Current Detection	Yes	
Output Overcurrent Protection	Yes	
Anti-Islanding Protection	Yes	
DC Surge Protection	Type II	
DC Surge Protection	Type II	
AC Surge Protection	Yes	
Zero-Export Function	Yes	
Photovoltaic String Monitoring	Yes	
Arc-Fault Circuit Interrupter (AFCI)	Yes	
DC Switch	Yes	
General Data		
Dimensions (W × H × D)	560 × 570 × 275 mm	
Weight	≤55 kg	
Ingress Protection Rating	IP65	
Operating Temperature	-40 °C to +60 °C (-40 °F to 140 °F)	
Cooling	Smart air cooling	
Topology	Without transformer	
Operating Altitude	4000 m (>3000 m derating)	
Display	LED, WLAN + APP	
Communication	RS485/ Wi-Fi	
DC Interface Type	MC4	
AC Interface Type	OT/DT Terminal	