

380V THREE-PHASE ON-GRID PHOTOVOLTAIC SOLAR INVERTER

TSI-T30K2



PRODUCT FEATURES



EFFICIENT

- Multi-MPPT with a maximum efficiency of 98.6%.
- 110% AC overload.
- Up to 40 A MPPT input current to support 210 mm bifacial photovoltaic modules.



RELIABLE

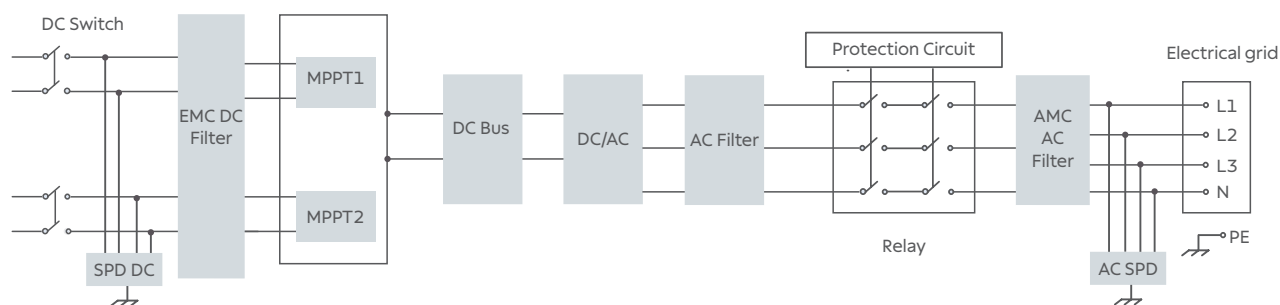
- Smart, high-precision string detection.
- Built in SPD for surge protection and AFCI function.
- Wide AC voltage range for unstable power grids.



EASY TO USE

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

TOPOLOGICAL GRAPH



TECHNICAL DATA

Model	TSI-T30K2
DC Input	
Maximum Recommended Input Power	45 kW
Maximum Input Voltage	1100 VDC
Starting Voltage	180 VDC
MPPT Operating Range	200 ~ 1000 VDC
MPPT Voltage at Full Load	425 ~ 850 VDC
Maximum Input Current per MPPT	45 A / 45 A
Maximum Short Circuit Current	67.5 A / 67.5 A
Number of DC Inputs	3 / 3
MPPT Number	2
AC Output	
Rated Output Power	30 kW
Maximum Output Power	33 kW
Rated Output Voltage	380 VAC / 400 VAC (3P + N + PE)
Operating Voltage Range	300 ~ 520 VAC
Rated Output Current	43.5 A
Maximum Output Current	47.8 A
Rated Grid Frequency	50 Hz / 60 Hz
Power Factor	>0.99 (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
AC Surge Protection	Type II
I-V Curve Scan	Yes
Zero-Export Function	Yes
Photovoltaic String Monitoring	Yes
Arc-Fault Circuit Interrupter (AFCI)	Yes
DC Switch	Yes
General Data	
Dimensions (W x H x D)	560 x 570 x 275 mm
Weight	≤55 kg
Ingress Protection Rating	IP65
Operating Temperature	-40 °C to +60 °C (-40 °F to 140 °F)
Cooling	Natural air cooling
Topology	Without transformer
Operating Altitude	4000 m (>3000 m derating)
Display	LED, WLAN + APP
Communication	Wi-Fi
DC Interface Type	MC4
AC Interface Type	OT / DT Terminal