

Three Phase Grid Tie Inverter

TP Series 4000W - 15kW



Key Features

- **IP65 Waterproof Rating**

The inverter comes with an IP65 rating, making it dust-proof and waterproof, suitable for outdoor installation in a variety of environmental conditions.

- **Dual MPPT Inputs**

Allows the connection of multiple solar panel arrays with different orientations, maximizing energy harvest.

- **Grid Connection**

Allows the solar system to work in tandem with the utility grid. Excess energy generated can be fed back to the grid for credit or compensation, depending on

local regulations.

- **Parallel Operation Capability**

Supports multiple inverters working together in parallel to scale up power generation for larger solar installations.

- **Built-in SPD**

Protects against transient overvoltage events such as lightning strikes and grid fluctuations.

Smart Monitoring

Equipped with Wi-Fi module, it allows for remote monitoring via mobile apps or web portals, providing real-time data on energy production, system performance, and fault diagnostics.

Specification 4000W-8000W

Model	TP4KTL	TP5KTL	TP6KTL	TP8KTL
INPUT (DC)				
Max. Input Power	5500W	6500W	7500W	9500W
Max. Input Voltage	1000Vdc			
Start Voltage	160Vdc			
MPPT Voltage Range	160-850Vdc			
Max. Input Current	18A / 18A			
Max. Short Circuit Current per MPPT	25A / 25A			
Number Of MPPT Trackers	2			
String Per MPPT	1			
OUTPUT(AC)				
Nominal Output Power	4000W	5000W	6000W	8000W
Max. Output Power	5000W	6000W	7000W	8800W
Max. Output Current	8A	10A	12A	15A
Rated Grid Frequency/Range	50Hz (44Hz-55Hz) / 60Hz (54Hz-65Hz), auto-selection			
Rated Grid Voltage/Range	380/400/415Vac, 280-490Vac			
Power Factor	~1% (0.8 leading ~ 0.8 lagging)			
THDi	<5% (Rated Power)			
EFFICIENCY				
Max. Conversion Efficiency	98.00%	98.20%	98.20%	98.30%
European Efficiency	97.50%	97.70%	97.70%	97.80%
MPPT Efficiency	99.90%			
SAFETY AND PROTECTION				
DC Switch	Yes			
DC Reverse Polarity Protection	Yes			
Anti-islanding Protection	Yes			
Residual Current Monitoring	Yes			
Leakage Current Protection	Yes			
Ground Fault Monitoring	Yes			
Insulation Resistance Monitoring	Yes			
DC/AC Side SPD	Yes			
Surge Protection	Type II			
AFCI Protection	Optional			
COMMUNICATION				
Display	LCD / LED + APP			
Communication Interface	RS485 / WiFi / GPRS			



STANDARD COMPLIANCE	
Certificate	VDE-AR-N4105, VDE0126-1-1, AS4777, IEC61727, IEC62116
GENERAL DATA	
Topology	Transformerless
Night Power Consumption	< 10W
Dimension (WxHxD)	480x476x175mm
Weight	16Kg
Operation Temperature	-25°C ~ +60°C
Relative Humidity	0 ~ 100%
Operation Altitude	< 4000m without power derating
Noise Level	< 25dB
Cooling Method	Smart Cooling
Protection Degree	IP65
Warranty	Standard 5 Years, 7/10 Years Optional

Product specifications are subject to change without further notice.

Specification 10KW-15KW

Model	TP10KTL	TP12KTL	TP15KTL
INPUT (DC)			
Max. Input Power	11500W	18000W	22500W
Max. Input Voltage	1000Vdc		
Start Voltage	160Vdc		
MPPT Voltage Range	160-850Vdc		
Max. Input Current	18A / 18A		
Max. Short Circuit Current per MPPT	25A / 25A		
Number Of MPPT Trackers	2		
String Per MPPT	1		
OUTPUT(AC)			
Nominal Output Power	10000W	12000W	15000W
Max. Output Power	11000W	13200W	16500W
Max. Output Current	17A	20A	23A
Rated Grid Frequency/Range	50Hz (44Hz-55Hz) / 60Hz (54Hz-65Hz), auto-selection		
Rated Grid Voltage/Range	380/400/415Vac, 280-490Vac		
Power Factor	~1% (0.8 leading ~ 0.8 lagging)		
THDi	<5% (Rated Power)		
EFFICIENCY			
Max. Conversion Efficiency	98.40%	98.40%	98.40%
European Efficiency	97.90%	97.90%	98.00%
MPPT Efficiency	99.90%		
SAFETY AND PROTECTION			
DC Switch	Yes		
DC Reverse Polarity Protection	Yes		
Anti-islanding Protection	Yes		
Residual Current Monitoring	Yes		
Leakage Current Protection	Yes		
Ground Fault Monitoring	Yes		
Insulation Resistance Monitoring	Yes		
DC/AC Side SPD	Yes		
Surge Protection	Type II		
AFCI Protection	Optional		
COMMUNICATION			
Display	LCD / LED + APP		
Communication Interface	RS485 / WiFi / GPRS		

STANDARD COMPLIANCE	
Certificate	VDE-AR-N4105, VDE0126-1-1, AS4777, IEC61727, IEC62116
GENERAL DATA	
Topology	Transformerless
Night Power Consumption	< 10W
Dimension (WxHxD)	480x476x175mm
Weight	16Kg
Operation Temperature	-25°C ~ +60°C
Relative Humidity	0 ~ 100%
Operation Altitude	< 4000m without power derating
Noise Level	< 25dB
Cooling Method	Smart Cooling
Protection Degree	IP65
Warranty	Standard 5 Years, 7/10 Years Optional

Product specifications are subject to change without further notice.