



**ON GRID
SOLAR INVERTER**
5kW -25kW
THREE-PHASE



Key Features



**BIG LCD
DISPLAY**



**COMPACT &
EASY TO INSTALL**



**POWER
EXPORT LIMIT**



**WIFI / GPRS / LAN
COMMUNICATION
OPTIONAL**



**Patented
Cooling Design**



**Unique H6 Topology
Helps Prevent
Leakage Current**



**IP66
Protection**



**Built-in
DC Switch**

Smarten STAR Series Three-Phase On-Grid Solar Inverter (5 kW-25 kW) Built for commercial and industrial solar applications, the Smarten STAR Series delivers maximum energy yield with up to 98.5% peak efficiency.

Advanced Efficiency: Transformerless design with dual MPPT trackers and a wide input voltage range of up to 850 V DC.

Enhanced Protection: Unique H6 topology helps prevent leakage current and includes a built-in DC breaker, SPDs, and an IP66-rated enclosure.

Smart Operation: Smart dual cooling system with LCD display and optional WiFi, GPRS, LAN, and RS485 communication.

Smart Conversion • Maximum Solar Performance

TECHNICAL SPECIFICATIONS

Model	TP5KW	TP6KW	TP8KW	TP10KW	TP12KW	TP15KW	TP17KW	TP20KW	TP25KW
INPUT (DC)									
Maximum DC Power (W)	6500W	7500W	9500W	11.5KW	18KW	22.5KW	25.5KW	30KW	30KW
Maximum DC Voltage (Vdc)	1000 V DC								
Minimum Operating Voltage (Vdc)	160 V DC.						250 V DC		
MPPT Voltage Range (Vdc)	160–850 V DC						200–850 V DC		
Maximum Input Current per String (A)	18 A / 18 A						26 A / 26A	36 A / 26 A	
Maximum Input Short-Circuit Current per MPPT	25A / 25A						34 A / 34 A	46 A / 34 A	
Number of MPPT Trackers	2								
Strings per MPPT Tracker	1						2		
OUTPUT (AC)									
Nominal AC Power (W)	5000	6000	8000	10KW	12KW	15KW	17KW	20KW	25KW
Maximum AC Apparent Power (VA)	6000	7000	8800	11KVA	13.2KVA	16.5KVA	18.7KVA	22.0KVA	27.5KVA
Maximum Output Current (A)	10	12	15	17	20	23	25	30	36
Nominal AC Output Voltage (V)	50 / 60 Hz, 400 V AC								
AC Output Voltage Range (V)	45–55 Hz; 280–490 V AC (Adjustable)								
Power Factor	Adjustable from 0.8 Leading to 0.8 Lagging								
Harmonics	< 5%								
Grid Connection	3P + N + PE								
EFFICIENCY									
Maximum Efficiency	98.2%	98.2%	98.3%	98.4%	98.4%	98.4%	98.5%	98.5%	98.5%
European Efficiency	97.7%	97.7%	97.8%	97.9%	97.9%	98.0%	98.1%	98.1%	98.2%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
SAFETY AND PROTECTION									
DC Reverse-Polarity Protection	Yes								
DC Circuit Breaker	Yes								
DC / AC Surge Protection Device (SPD)	Yes								
Leakage Current Protection	Yes								
Insulation Impedance Detection	Yes								
Residual Current Protection	Yes								
GENERAL PARAMETERS									
Dimensions (W × H × D) (mm)	480 × 476 × 157						520 × 510 × 160		
Weight (kg)	16						23		
Operating Temperature Range (°C)	–25 °C to +60 °C								
Degree of Protection	IP65								
Cooling Method	Smart Cooling								
Topology	Transformerless								
Display	LCD								
Relative Humidity	0–95% RH (Non-Condensing)								
Communication Interface	RS485 / WiFi / GPRS								



SCAN TO CONNECT
WITH GLOBAL SALES



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