

SolarMax TP-Series

Three-phase • 5 kW to 7 kW

The small inverter for residential PV plants



- Individual tracker concept
- Versatile connection range
- Three phase mains connection
- Direct connection to the Internet
- Integrated I/O interface

SolarMax TP-Series

Specifications

		SolarMax 5TP2	SolarMax 6TP2	SolarMax 7TP2
Input values	MPP-voltage range ¹⁾	260 V ... 750 V	310 V ... 750 V	360 V ... 750 V
	Control range	250 V ... 840 V	250 V ... 840 V	250 V ... 840 V
	Minimum DC-voltage	250 V	250 V	250 V
	Maximum DC-voltage	900 V	900 V	900 V
	Maximum DC-current	10 A + 10 A	10 A + 10 A	10 A + 10 A
	Number of MPP-Trackers	2	2	2
	Max. PV generator output power per MPPT	5,000 Wp	5,000 Wp	5,000 Wp
	Number of string connections	2	2	2
Connection type	Wieland PST40i1 (identical to MC4)			
Output values	Rated output power ²⁾	5,000 W	6,000 W	7,000 W
	Maximum apparent output power ²⁾	5,000 VA	6,000 VA	7,000 VA
	Maximum AC current	3 x 7.5 A	3 x 9.5 A	3 x 10.2 A
	Nominal mains voltage	3 x 400 V		
	Mains nominal frequency / range	50 Hz / 45 Hz ... 55 Hz		
	Power factor cos (φ)	Adjustable from 0.8 overexcited to 0.8 underexcited		
	Distortion factor at rated output power	< 3 %		
	Connection type	Terminal (2.5 mm ² - 10 mm ²)		
	Grid connection	Three-phase (L1 / L2 / L3 / N / PE)		
	Power input at night	< 0.1 W		
Efficiency	Max. efficiency	97.6 %	97.6 %	97.6 %
	Euro efficiency	96.5 %	96.6 %	96.7 %
Ambient conditions	Protection class	IP65		
	Ambient temperature range (for rated power output)	- 20 °C ... + 60 °C (+ 45 °C)		
	Relative humidity	0 % ... 100 % (without condensation)		
	Maximum operating level above sea level	2,000 m		
	Fire protection	According EN 62109-1/ -2		
Noise emissions (1,5 m)	< 30 dBA (fan off) / < 58 dBA (fan on)			
Configuration	Display	LC graphics display with backlighting and status LED		
	Inverter topology	HERIC [®] Transformerless		
	DC-disconnector	Integrated		
	Data logger	Energy yield, peak output and operating duration of the last 31 days, 12 months, 10 years, performance curves of the last 7 days		
	Fault current monitoring	Internal, AC/DC sensitive		
	Housing / service cover	Aluminium / plastic ASA+PC		
Overvoltage conductor, DC and AC	Requirement class D (VDE 0675-6) and/or type 3 (EN 61643-11)			
Standard & guidelines	EMV	EN 61000-3-2 / EN 61000-3-3 / EN 61000-6-2 / EN 61000-6-3		
	Grid connection	VDE 0126-1-1 A1:2012 / VDE 0126-1-1:2013 / VDE-AR-N 4105:2011 E8001-4-712		
	Device safety	EN 62109-1/ -2		
Interfaces	Data communication	RS485 / Ethernet (Plug & Play)		
	Status signaling contact	Integrated		
	Connection ripple control signal receiver	Integrated		
	Connection lightning protection monitor	Integrated		
	Connection to external grid monitoring	Integrated		
	Connection to external energy counter	S0		
Weight & Dimensions	Weight	21 kg	21 kg	21 kg
	Dimensions (B x H x T)	476 mm x 360 mm x 180 mm		
Warranty	Standard warranty	5 years		
	Warranty extensions	To 10, 15, 20 or 25 years		

¹⁾ For AC rated power output at symmetrical design.

²⁾ Depending on the country setting, deviating values are possible.