

# SolarMax TS-Series

330 kW to 1,440 kW

The all-round solution for large-scale PV installations



- Maximum pay-back
- Smarte operation and communication
- TS-SV Master Control Unit
- Potential equalization set
- Grid management
- Competent after-sales service
- Service-hotline

# SolarMax TS-Series

## Technical specifications

		330 / 660 / 990 / 1320 TS-SV	360 / 720 / 1080 / 1440 TS-SV
<b>Input values</b>	MPP-voltage range	450 V ... 800 V	510 V ... 800 V
	Maximum DC-voltage	900 V	900 V
	Maximum DC-current	720 A / 1,440 A / 2,160 A / 2,880 A	720 A / 1,440 A / 2,160 A / 2,880 A
	Number of MPP-Trackers	1 or 3 / 6 / 9 / 12	1 or 3 / 6 / 9 / 12
	Connection type	Threaded bolts M8	
	Number of string connections	2	
<b>Output values</b>	Rated output power	330 kW / 660 kW / 990 kW / 1,320 kW <sup>1)</sup>	360 / 720 / 1,080 / 1,440 kW <sup>2)</sup>
	Maximum apparent output power	340 kVA / 680 A / 1,020 A / 1,360 kVA	370 kVA / 740 kVA / 1,110 kVA / 1,480 kVA
	Maximum AC current	700 A / 1,400 A / 2,100 A / 2,800 A	666 A / 1,332 A / 1,998 A / 2,664 A
	Nominal mains voltage	3 x 280 V	3 x 320 V
	Mains nominal frequency / range	50 Hz / 45 Hz ... 55 Hz (60 Hz / 55 Hz ... 65 Hz upon request)	
	Power factor cos (φ)	Adjustable from 0.8 overexcited to 0.8 underexcited	
	Distortion factor at rated output power	< 3 %	
	Connection type	3 x 3 threaded bolts M8	
	Grid connec	Three-phase (without a neutral conductor)	
	Overvoltage Category	2	
<b>Efficiency</b>	Max. efficiency	98 %	98 %
	Euro efficiency <sup>3)</sup>	97.2 %	97.4 %
<b>Power input</b>	Own consumption (night)	< 7 W / 14 W / 21 W / 28 W	
<b>Ambient conditions</b>	Protection type compliant with EN 60529	IP20	
	Ambient temperature range	- 20 °C ... + 50 °C	
	Ambient temperature range for rated power output	- 20 °C ... + 45 °C	
	Relative humidity	0 % ... 98 % (without condensation)	
	Maximum altitude above sea level	2,000 m (without derating)	
	Noise emissions	< 65 dBA (1.5 m)	
	Degree of soiling	PD2	
<b>Configuration</b>	Display (in MCU)	Graphic LC display with backlight and status-LED	
	Data logger (in MCU)	Data logger for energy yield, peak output and operating duration of the last 31 days, 12 months, 10 years	
	Galvanic insulation	No galvanic isolation: direct connection to MV transformer	
<b>Standards &amp; guide-lines</b>	EMC	EN 61000-6-2 / EN 61000-6-4	
	Standard / guideline compliance	BDEW MV-Guidelines <sup>4)</sup> / RD 661	
	Device safety	EN 62109-1	
<b>Interfaces</b>	Data communication (in MCU)	RS485 / Ethernet via two RJ45-sockets	
	Status signalling contact (in MCU)	Potential-free terminal contact pair (configurable function)	
	Alarm input (in MCU)	Terminal contact pair for connection to MaxConnect plus	
	Inverter shut-off 1	Two terminal contact pairs (can be chain-linked via several SolarMax TS-SV)	
	Inverter shut-off 2 (in MCU)	Terminal contact pair	
<b>Weight &amp; dimensions</b>	Weight	990 kg / 1,980 kg / 2,970 kg / 3,960 kg	
	Dimensions in mm (W x H x D)	1 / 2 / 3 / 4 x 1,200 mm x 1,970 mm x 800 mm	
<b>Warranty</b>	Standard warranty	2 years	
	Warranty extensions	To 5, 10, 15, 20 or 25 years	

<sup>1)</sup> At cos(φ) = 1, UAC = 280 V.

<sup>2)</sup> At cos(φ) = 1, UAC = 320 V.

<sup>3)</sup> In single-MPPT operation with active load optimisation (see operating instructions parameter configuration with MaxTalk 2 Pro).

<sup>4)</sup> In preparation.

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