SolarMax MT series

The power pack for maximum yields.

20

More than
20 years Swiss Quality
and Experience

SolarMax®
SWISS QUALITY

All good things come in three phases.

We have been developing and producing transformerless inverters for over 20 years. Our engineers have effectively exploited this know-how to develop the new SolarMax MT series. The result is a highly efficient inverter which feeds the grid with three-phase power and which gets more power out of each PV installation – whether it is a medium-size home installation or a major industrial project. A high input voltage reduces cable losses and expenses to a minimum. Thanks to the multi-tracking concept providing for as many as three MPP trackers, different roof surfaces, inclination angles and orientations present no problem – for greater layout flexibility. In addition, all inverters are light-weight, easily installed and compatible with the proven “MaxComm” components.

Maximum pay-back

With a euro efficiency of 97.5 % the inverters of the SolarMax MT series maximise yields of any PV plant. Maximum DC voltages of up to 900 V enable longer strings reducing cable losses and expenses.

Swiss Quality

Each SolarMax MT series inverter satisfies all the requirements of the GS mark of conformity for product safety. Thanks to our high quality standards we can grant a standard five-year manufacturer’s warranty for each string inverter which can be extended optionally to a maximum of 25 years.

Clever multi-tracking

PV installations equipped with inverters from the Solar Max MT series make more efficient use of different roof surfaces. Multi-tracking enables the operating point of individual module fields to be set, and thus optimised, individually. The innovative and flexible multi-tracking enables the solar generator to be segmented specifically to minimise the power losses which can arise from temporary shading.

Competent after-sales service

If a device fails to function normally there is a hotline ready to help you find the source of the malfunction. If the device is the cause of the malfunction we will replace it without delay. In addition, we also support our partners with regular training and our free “MaxDesign” design software, which makes creating an installation as easy as anything!

Innovative cooling system

A new, intelligent cooling concept exhausts the heat more efficiently out of the housing, thus reducing rate at which the electronic components age. All SolarMax MT series inverters also work under the harshest conditions without any loss in performance – and that at ambient temperatures as high as 50 °C. This is why sensors monitor the operating temperature to protect the inverters against over-heating.

Smart operation and communication

All the relevant information and settings are presented on the straight-forward graphics display. And an integrated data logger stores all the important data from the sensors. Every inverter is equipped with an RS485 and Ethernet standard interface and can be easily enhanced by adding on “MaxComm” components. For example, the free MaxMonitoring App presents the output data in a clear manner so that you can see at any time how much environmentally friendly solar energy a facility is generating and has fed into the public grid.

Easier-than-ever installation

The inverters of SolarMax MT series are easy, compact and their plug-in, easily accessible connections can be installed in no time. Thanks to the included mounting rails they can be easily mounted on the wall. The integrated DC circuit breakers enable the inverters to be disconnected from the solar generator in one step.

MaxComm for system monitoring

MaxWeb

The MaxWeb xp data logger forms the core of the web-based monitoring system; it enables multimedia communication with the photovoltaic plant and sends information via the internet to wherever you wish to receive it. MaxRemote enables remote-controlled performance reduction by the operator.

MaxMonitoring

The cost-free app visualises the performance data of the photovoltaic system and of individual inverters on site.

MaxTalk

User-friendly PC software for on site communication and for local system monitoring.

Specifications

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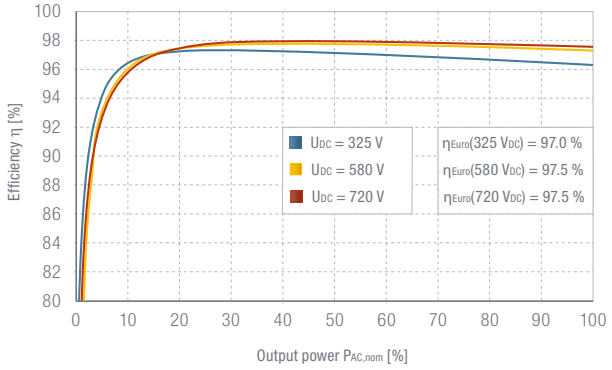
		SolarMax 8MT2	SolarMax 10MT2	SolarMax 13MT2	SolarMax 15MT2	SolarMax 13MT3	SolarMax 15MT3
Input values	MPP voltage range	250 … 750 V	250 … 750 V	250 … 750 V	250 … 750 V	250 … 750 V	250 … 750 V
	Minimum voltage for rated power	300 V	290 V	370 V	430 V	280 V	320 V
	Maximum DC voltage	900 V	900 V	900 V	900 V	900 V	900 V
	Maximum DC current	1 x 18 A / 1 x 9 A	2 x 18 A	2 x 18 A	2 x 18 A	3 x 16 A	3 x 16 A
	Number of MPP-Trackers	2	2	2	2	3	3
	Max. PV generator output per MPP tracker	MPPT1: 9'000 W MPPT2: 4'500 W	9'000 W	9'000 W	9'000 W	9'000 W	9'000 W
	String connections	1 x 2 / 1 x 1	2 x 2	2 x 2	2 x 2	3 x 2	3 x 2
	Connection type	MC 4	MC 4	MC 4	MC 4	MC 4	MC 4
Output values	Rated output power at cos(ϕ) = 1	8'000 W	10'000 W	13'000 W	15'000 W	13'000 W	15'000 W
	Maximum apparent output power	8'000 VA	10'000 VA	13'000 VA	15'000 VA	13'000 VA	15'000 VA
	Nominal mains voltage	3 x 400 V	3 x 400 V	3 x 400 V	3 x 400 V	3 x 400 V	3 x 400 V
	Maximum AC current	3 x 12 A	3 x 16 A	3 x 20 A	3 x 22 A	3 x 20 A	3 x 22 A
	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 power	< 3 %					
	Connection type	Amphenol					
	Grid connection	Three-phase (3 / N / PE)					
Efficiency	Max. efficiency	98.0 %					
	Europ. efficiency	97.5 %					
Power input	Own consumption (night)	0 W					
Ambient conditions	Protection type compliant with EN 60529	IP65					
	Ambient temperature range	-20 °C…+60 °C					
	Ambient temperature range at rated power	-20 °C…+50 °C					
	Relative humidity	0…98% (no condensation)					
Configuration	Display	Graphic LC display with backlight and status LED					
	Circuit type	two-stage, transformerless (no galvanic isolation)					
	Data logger	Data logger for energy yield, peak output and operating duration for the last 31 days, 12 months and 10 years					
	Fault current monitoring	Internal, AC/DC sensitive					
	Casing	Aluminium, cover powder-coated					
	Overvoltage conductor DC	Requirement class C (VDE 0675-6) or type 2 (EN 61643-11)					
	Overvoltage conductor AC	Requirement class D (VDE 0675-6) or type 3 (EN 61643-11)					
Standards & guidelines	CE-compliant	Yes					
	EMC	EN 61000-3-2 / EN 61000-3-3 / EN 61000-3-11 / EN 61000-3-12 / EN 61000-6-2 / EN 61000-6-3					
	Standard / guideline compliance	VDE-AR-N 4105 / VDE 0126-1-1 / BDEW MV Guideline [1] / CEI 0-21 / RD 661 / RD 1699 / G59/2 / G83/1-1 [2] / PPC Guide / C10/11 / EN 50438 [3] / AS 4777 / CQC Golden Sun					
	Device safety	"GS certified safety" VDE with EN 50178 / IEC 62109-1 AS 3100					
Interfaces	Data communication	RS485 / Ethernet via two RJ45 sockets					
	Status signalling contact	M12 connector with relay as N/C contact / N/O contact					
Weight & dimensions	Weight	39 kg	39 kg	39 kg	39 kg	42 kg	42 kg
	Dimensions in mm (W x H x D)	550 x 750 x 200					
Warranty		Standard 5 years / extension to 10, 15, 20 or 25 years possible					

[1] Not available for SolarMax 8MT2
[2] Only the inverters SolarMax 8MT2 and SolarMax 10MT2
[3] Portugal

SolarMax 15MT3 efficiency curve



2013/01 en

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