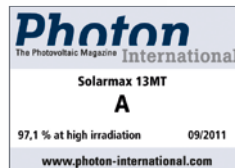
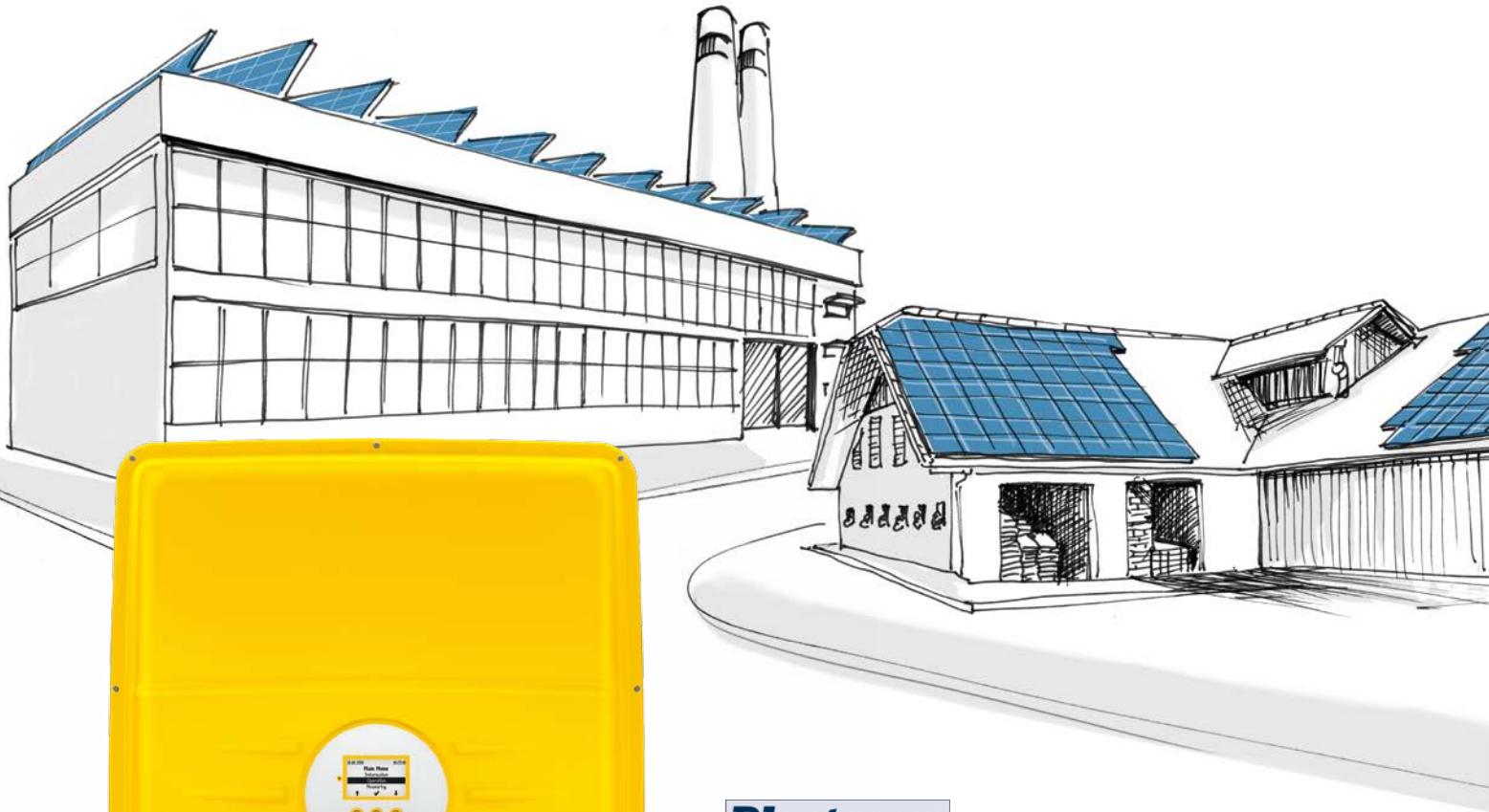


# SolarMax MT series

The all-rounder for trade and industry



20

More than  
20 years Swiss Quality  
and Experience

 **SolarMax**<sup>®</sup>  
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 employed this know-how to develop the new SolarMax MT series. The result are highly efficient string inverters feeding the grid with three-phase power. Whether it is a medium-size home installation or a major industrial project - these inverters achieve the optimum from every PV power plant. 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. Furthermore, all inverters are very light, easy to install, and compatible with the tried and tested “MaxComm” components.



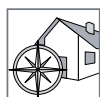
## Maximum pay-back

With a Euro efficiency of 97.5%, the SolarMax MT series inverters maximise the yields of every PV power plant. The high input voltage of up to 900V allows for longer strings than before. This reduces cable losses and the wiring expenditure – for maximum pay-back.



## Swiss Quality

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



### **Clever multi-tracking**

PV power plants equipped with Solar Max MT series inverters make more efficient use of the roof surfaces. Thanks to an innovative and flexible multi-tracking concept, the operating point of individual module fields can be set, and thus optimised, individually. The solar generator can be segmented specifically already during installation in order to also minimise losses in performance which may occur due to temporary shading.



### **Competent after-sales service**

If a device fails to function normally, there is a competent hotline ready to help you find the source of the malfunction. If the device is the cause of the malfunction, we will replace the inverter without delay. In addition, we also support our partners with regular training and our free "MaxDesign" design software. This makes creating a power plant as easy as anything!



## Innovative cooling system

A new, intelligent cooling concept dissipates the heat even more efficiently from the housing, thus reducing the rate the electronic components age. All SolarMax MT series inverters also work under the harshest conditions without any loss in performance – and up to ambient temperatures as high as 50° C. This is why sensors monitor the operating temperature to protect the inverters against overheating.



## Smart operation and communication

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



## Easier-than-ever installation

The SolarMax MT series inverters are light, compact and their plug-in, easily accessible connections can be installed in no time. Thanks to the included mounting plate 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 plant monitoring

## MaxWeb

The MaxWeb xp data logger forms the core of the web-based plant monitoring; it enables multimedia communication with the photovoltaic power plant and sends information via the internet to freely selectable devices. MaxRemote enables remote-controlled performance reduction by the grid operator.



## MaxMonitoring

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

## MaxTalk

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

# Specifications



		SM 6MT2	SM 8MT2	SM 10MT2	SM 13MT2	SM 15MT2	SM 13MT3	SM 15MT3	
<b>Input values</b>	MPP voltage range <sup>1)</sup>	340...750V	300...750V	290...750V	370...750V	430...750V	280...750V	320...750V	
	Minimum DC voltage	250V	250V	250V	250V	250V	250V	250V	
	Maximum DC voltage	900 V	900V	900V	900V	900V	900V	900 V	
	Maximum DC current	1 x 9A / 1 x 9A	1 x 18A / 1 x 9A	2 x 18A	2 x 18A	2 x 18A	3 x 16A	3 x 16A	
	Number of MPP-Trackers	2	2	2	2	2	3	3	
	Max. PV generator output power per MPP tracker	MPPT1: 7'500W MPPT2: 4'500W	MPPT1: 9'000W MPPT2: 4'500W	9'000W	9'000W	9'000W	9'000W	9'000W	
	String connections	1 x 2 / 1 x 1	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	MC 4	
<b>Output values</b>	Rated output power at $\cos(\varphi) = 1$	6'000W	8'000W	10'000W	13'000W	15'000W	13'000W	15'000W	
	Maximum apparent output power	6'000VA	8'000VA	10'000VA	13'000VA	15'000VA	13'000VA	15'000VA	
	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	3 x 400 V	
	Maximum AC current	3 x 9A	3 x 12A	3 x 16A	3 x 20A	3 x 22A	3 x 20A	3 x 22 A	
	Mains nominal frequency / range	50Hz / 45Hz...55Hz							
	Power factor $\cos(\varphi)$	Adjustable from 0.8 overexcited to 0.8 underexcited							
	Distortion factor at rated output power	< 3%							
	Connection type	Connector (locking)							
	Grid connection	Three-phase (3 / N / PE)							
	Power input at night	0W							
<b>Efficiency</b>	Max. efficiency	98.0%							
	European efficiency	97.5%							
<b>Ambient conditions</b>	Protection type	IP65							
	Ambient temperature range for rated power output)	-20°C...+60°C (+50°C)							
	Relative humidity	0...98 % (no condensation)							
	Maximum altitude above sea level	2000m (without derating)							
<b>Configuration</b>	Display	Graphic LC display with backlight and status LED							
	Circuit type	Two-stage, transformerless							
	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							
	Overvoltage conductor DC	Requirement class C (VDE 0675-6) and/or type 2 (EN 61643-11)							
	Overvoltage conductor AC	Requirement class D (VDE 0675-6) and/or type 3 (EN 61643-11)							
<b>Standards &amp; guidelines</b>	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							
	Grid connection	VDE-AR-N 4105 / VDE 0126-1-1 / BDEW MS-Richtlinie <sup>2)</sup> / CEI 0-21 / RD 661 / RD 1699 / G59/2 / G83/2 <sup>3)</sup> / PPC Guide / C10/11 / EN 50438 <sup>4)</sup> / AS 4777 / CQC Golden Sun							
	Device safety	EN 50178 / IEC 62109-1/-2 / AS 3100							
<b>Interfaces</b>	Data communication	RS485 / Ethernet							
	Status signalling contact	M12 connector with relay as N/C contact / N/O contact							
	Connection of external grid monitoring	M12 connector							
<b>Weight &amp; dimensions</b>	Weight	39 kg	39kg	39kg	39kg	39kg	42kg	42 kg	
	Dimensions in mm (L x H x W)	550 x 750 x 200							
<b>Warranty</b>	Standard warranty	5 years							
	Warranty extensions	to 10, 15, 20, or 25 years							

<sup>1)</sup> For AC rated power output

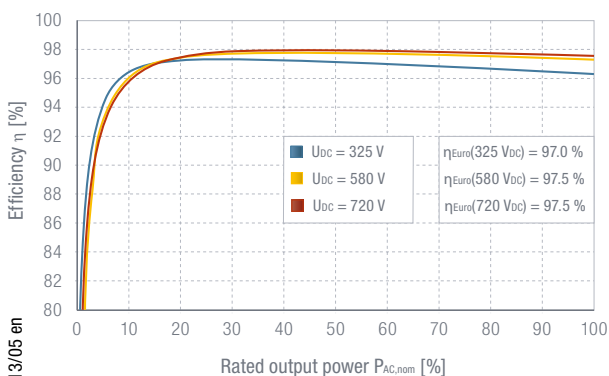
<sup>2)</sup> Not available for SolarMax 6MT2 and 8MT2

<sup>3)</sup> Only the inverters SolarMax 8MT2 and 10MT2

<sup>4)</sup> Portugal

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## SolarMax 15MT3 efficiency curve



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