SolarMax 20C/25C/30C/35C

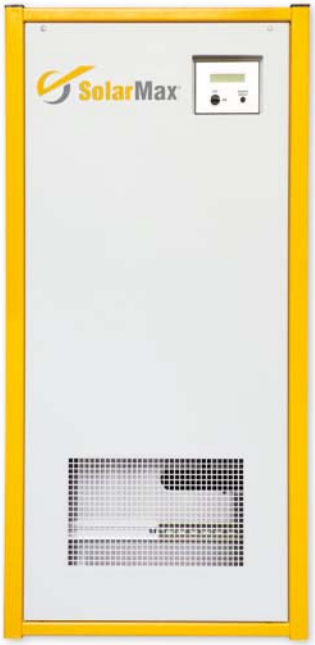
Proven reliability.

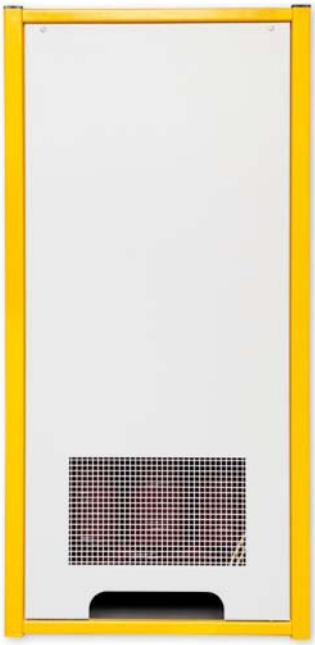
20 years Swiss Quality
and Experience

SolarMax®
SWISS QUALITY

Proven reliability.

Sputnik Engineering commissioned the first SolarMax PV central inverters in 1992. Since then thousands of central inverters have been put into operation and deliver the best energy yields day after day. All made possible by proven C series central inverters. If you need a central inverter with galvanic isolation and as much as 35 kilowatts of output, the C series devices are the ideal solution for your needs. These inverters deliver high energy yields and feature the greatest operational safety while keeping system costs to a minimum. What also makes C series inverters attractive is their price/performance ratio and their excellent services such as the service package MaxControl.





Swiss Quality

For years quality has been our highest priority. The development, the final installation and all quality controls of the C series are conducted in Switzerland. This is something you can rely on.

Maximum reliability

When you decide for a SolarMax central inverter of the C series you benefit from a proven, stable 3-phase inverter with galvanic isolation, the best possible operational safety and a long useful life.

Potential equalization set

As an option, the C series central inverters can be equipped with a potential equalization set (PES). The PES enables you to earth the PV generator which allows the use of thin-film or back-side-contacted modules.

TÜV type approved

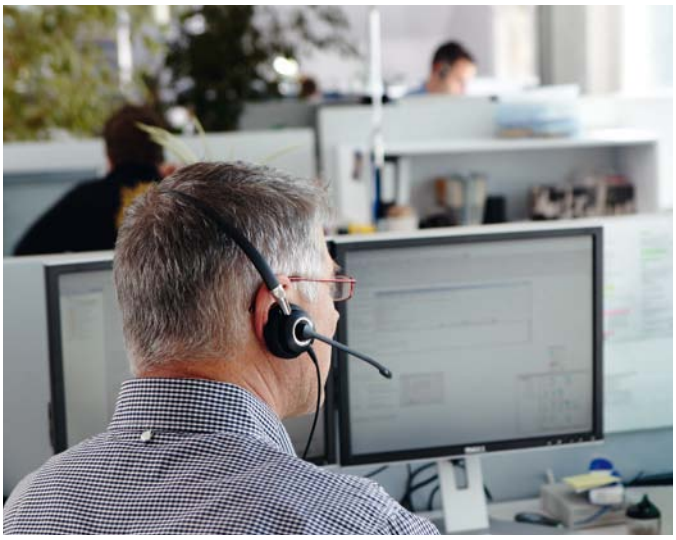
The inverters of the C series are "TÜV type approved" and meet the applicable guidelines and product safety standards.

Attractive price / performance ratio

The inverters of the C series deliver great efficiency, maximum reliability, and interfaces for device monitoring at an attractive price.

Competent after sales service

And if a C series inverter should at any time fail to operate as usual, our Service Centre can provide straight-forward and competent assistance in five languages. If the solution cannot be found quickly, our service technicians will come to the site right away. We also support our partners by providing them with practical training sessions at regular intervals.



Warranty coverage

The central inverters of the C series are characterised by a two-year standard warranty that can be extended to up to 12 years (including standard warranty) using the options “Limited” and “Full”. MaxControl, the full-service package, can also be concluded for up to 20 years. This service package (alarm system, device and system monitoring, data analysis) includes an availability guarantee. If the availability of the inverter (per year) is lower than 97 %, we will provide you with a flat yield loss payment.

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.

MaxVisio

A touch display visualises the data from a photovoltaic plant including individual inverters.

MaxTalk

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

Accessories

MaxConnect plus

The devices of the MaxConnect series are generator terminal boxes for SolarMax central inverters. They are designed for the purpose of combining the individual cables of your solar generator. Thanks to single-cable monitoring the devices can detect defects and shadings prematurely. With integrated cable protections and over-voltage conductors, as well as an integrated high-performance circuit breaker the MaxConnect plus is secured comprehensively. Connection is implemented using terminal clamps.

MaxConnect plus p

With its housing made of plastic and the MC4 plug-and-socket connections for connecting the cables, the MaxConnect plus p meets the requirements of protection class II and does not require any earthing. The device meets the French UTE standard specifying this protection class for components on the direct current side of PV systems.

Specifications

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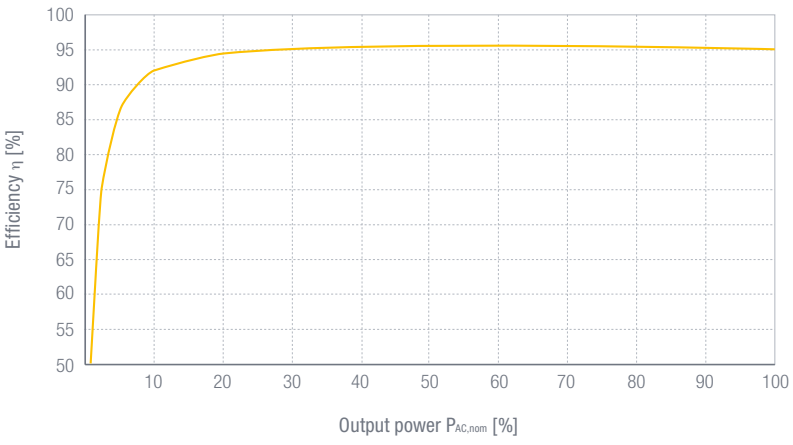
		SolarMax 20C	SolarMax 25C	SolarMax 30C	SolarMax 35C
Input values	Maximum PV generator output power [1]	24 kW	33 kW	40 kW	45 kW
	MPP voltage range	430...800 V			
	Maximum DC voltage	900 V			
	Maximum DC current	48 A	63 A	75 A	78 A
	Number of MPP-Trackers	1	1	1	1
	Connection type	3 x screw terminals 35 mm²			
Output values	Rated output power	20 kW	25 kW	30 kW	35 kW
	Maximum apparent output power	22 kW	27.5 kW	33 kW	38.5 kW
	Nominal mains voltage	3 x 400 V			
	Maximum AC current	31 A	38 A	46 A	54 A
	Mains nominal frequency / range	50 Hz / 45…55 Hz			
	Power factor (cos phi)	> 0.98			
	Distortion factor at rated power	< 3 %			
	Connection type	6 x screw terminals 35 mm²			
	Grid connection	Three-phase (with neutral conductor)			
Efficiency	Maximum efficiency	96 %			
	Europ. efficiency	94.8 %			
Power input	Own consumption, night	2…7 W			
Ambient conditions	Protection type compliant with EN 60529	IP20			
	Ambient temperature range at rated power	-20 °C …+ 40 °C			
	Relative humidity	0…98 % (no condensation)			
Configuration	Display	Two-Line, 16 Character LCD (Backlighted)			
	Data logger	Energy yield of the most recent day, month and year / Total operating hours			
	Galvanic isolation	LF transformer			
Standards & guidelines	CE-compliant	Yes			
	EMC	EN 61000-6-2 / EN 61000-6-4			
	Standard / guideline compliance	DK 5940 / RD 661			
	Device safety	TÜV “Type approved” compliant with EN 50178			
Interfaces	Data communication	RS232 / RS485			
	Fault alarm contact	Potential-free terminal contact pair			
	Alarm input	1 Terminal contact pair for connection to MaxConnect plus / 1 terminal contact pair for connection to an external voltage source (5…12 VDC)			
Weight & dimensions	Weight	275 kg	275 kg	370 kg	370 kg
	Dimensions in mm (W x H x D)	570 x 1170 x 570			
Warranty		Standard 2 years / extension to 10 or 12 years possible			

[1] Recommended overdimensioning15 % (ISE Fraunhofer study)

Efficiency SolarMax C series



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