



# SolarMax 300C

## Solar energy production in new dimensions

Your interest in producing energy in a clean and efficient manner is a clear indication that you are highly concerned about a sustainable economy and an environment worth living in. The aspect of rational and ecological energy production has gained ever increasing importance. With the SolarMax central PV-inverter 300C you have a cost-saving and extraordinarily efficient component of photovoltaic energy generation at hand. The SolarMax 300C offers you unique advantages in terms of efficiency and real money saving potential.

**Efficiency and Performance:** With its remarkable maximum efficiency of 96%, our many years of warranty and its low weight, SolarMax 300C offers unique and decisive advantages.

**Quality at a competitive price:** Although very competitively priced, SolarMax 300C combines highest quality with the advantage of our quick and competent service.

**Long service life and high reliability:** All SolarMax systems certainly comply with "TÜV TYPE APPROVED" standards and guarantee the optimum service life of all parts as well as immunity to interference of all components. The unit's operational safety has already been made a top priority in its development. SolarMax is one of the few systems featuring a switching concept offering enhanced operational safety and performance-optimised technology and a digital signal-processor control (DSP).

**Simplicity:** SolarMax central PV-inverters are straightforward to install. Start-up is absolutely simple and requires little time.

**All-inclusive, trouble-free package:** Investing in a "MaxControl" service agreement guarantees up to 20 years of trouble free system operation and provides the user with planning security enabling the user to calculate return on investment ratios over a defined period of time.

## Market leader with years of market expertise:

Sputnik Engineering has over 10 years experience in SolarMax technology and over 1000 central solar inverters are currently in operation.

Our team will provide support and advice from the planning stage right through to the operation of your solar system.



## Features

- Compact PWM sinus inverter
- Maximum efficiency
- MPP efficiency of over 99%
- Digital signal processor control (DSP)
- Competitive price/performance ratio
- Low weight and space saving design
- Suitable for unheated locations
- Warranty possible for up to 20 years
- Integrated interface for MaxCommBasic
- MaxControl option for automatic alarm, monitoring of the system and analysis of performance data
- Certificate TÜV Rheinland "TYPE APPROVED"
- Delivery within deadlines
- Hotline and quick response service



## Technical Specifications

	SolarMax 300C
<b>DC Input</b>	
Maximum PV Power STC installed*	400kW
Maximum Power Tracking Window	430 ... 800V <sub>DC</sub>
Maximum Open Circuit Voltage	900 V <sub>DC</sub>
For Module Configuration UMPP(STC)-Window (For Module Configuration UMPP (STC)-Window with mono- and polycrystalline solar cells)	540 .. 635 V <sub>DC</sub>
Operating Current	0 ... 730 A <sub>DC</sub>
Ripple Current	< 4% peak-peak

<b>AC Output</b>	
Rated output	300kW
Operating Grid Voltage	3 * 400 +10% / -15% V <sub>AC</sub>
Operating Current	0 ... 500 A <sub>AC</sub>
Power Factor	> 0.95
Frequency	50 +/- 0.5 Hz
Harmonic Current Distortion	< 3 %

<b>Systems</b>	
Tare Losses	2...7 W
Maximum Efficiency	96%
European Efficiency	94.8%
Ambient Operating Temperature	- 20 °C ... 40°C
Protection Type	IP 20
Topology	PWM (IGBT), with transformer
Humidity	0...98% non-condensing
EMI	EN 50081-1, EN 50082-1
Harmonics	EN 61000-3-4
Standards	CE Label Certificate TÜV Rheinland: "TYPE APPROVED"
Display	Two-line LCD display (Backlighting)
Data Communications	Integrated RS232/485 Interface
Dimensions (WxDxH)	2 casings with 120 x 80 x 200 cm each
Weight	2000 kg

\* recommended overload of 15% (see study from ISE Fraunhofer)

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