

# Specifications SunMaster XS



Model	XS2000	XS3200	XS4300	XS6500
Article number	I31012000	I31013200	I31014300	I31016500

## GENERAL

Operating temperature	-20 to 60 °C, full power up to 45 °C ambient air temperature, derating -3%/°C above 45 °C			
Relative humidity	max. 95% non-condensing			
Protection degree	IP44			
Safety class	class I (metal housing with earth connection)			
Galvanic isolation	yes (safety transformer)			
Dimensions, hxxwxd	545x356x145 mm	545x356x145 mm	545x356x145 mm	725x356x145 mm
Weight	10 kg	10 kg	10 kg	15 kg
Product warranty	5 year			

## SOLAR INPUT (DC)

Recommended PV power range	1300 – 2000 Wp	2200 – 3300 Wp	2900 – 4350 Wp	4000 – 7000 Wp
Nominal input power	1590 W DC	2650 W DC	3490 W DC	5265 W DC
Max. input power	1670 W DC	2780 W DC	3660 W DC	5525 W DC
Start-up power	5 W	7 W	7 W	10 W
Operating voltage range	100 – 450 V DC	100 – 600 V DC	100 – 550 V DC	100 – 600 V DC
MPP voltage range at nom. power	145 – 360 V DC	180 – 480 V DC	230 – 440 V DC	180 – 480 V DC
Max. voltage	450 V DC	600 V DC	550 V DC	600 V DC
Number of inputs	1	1	1	2 (independent)
Rated current	11 A	15 A	17 A	2x 15 A or 1x 30 A
MPP tracker	1 MPP tracker	1 MPP tracker	1 MPP tracker	2 MPP trackers
MPP efficiency	99.9% (Fraunhofer algorithm)			
DC connection	2 sets of MultiContact (4 mm) connectors			

## GRID OUTPUT (AC)

Voltage	230 V AC single phase (184 – 265 V, country dependent)			
Nominal output power at 45 °C	1500 VA	2500 VA	3300 VA	5000 VA ***
Max. output power	1575 VA *	2625 VA	3465 VA **	5000 VA ***
Nominal current	7 A	11 A	15 A	22 A
Frequency	45–65 Hz, country dependent			
Power factor	> 0.99 at full power			0.95 capacitive ..0.95 inductive
Harmonic distortion (THD)	< 3% at full power			
Standby power consumption	< 0.5 W			
European efficiency	94.4% at 300 V	94.3% at 400 V	94.6% at 370 V	94.5% at 400 V
Max. efficiency	95.7%	95.4%	95.6%	95.5%
AC connection	2.5 – 10 mm <sup>2</sup> terminal block			
Fuse	internal PCB fuse			

## REGULATIONS & DIRECTIVES

CE conformity	yes			
Installation size Germany to VDE4105	up to 3.68 kVA	up to 3.68 kVA	up to 3.68 kVA	up to 13.8 kVA
Electrical safety	EN 60950-1			
National grid requirements	VDE 0126-1-1 / DK5940 / RD1663-2000 / K SC 8536 / G83-1 / G59-2			

## MONITORING

User interface	integrated LCD display with backlight, 4 buttons and bright diagnostic LED, all relevant AC and DC values plus diagnostic messages.
External communication	2 surge protected RS485 connections, 2 MasterBus connections. Max. 20 XS units can be connected to one Data Control Pro datalogger.

## SAFETY REGULATIONS

General	galvanic separation between DC and AC side by means of a HF safety transformer
Island protection	redundant voltage and frequency window monitoring. Independent cut-off by means of 2-pole relay and solid state switch according to VDE V 0126-1-1:2006.
Temperature protection	thermal switch-off at internal over temperature
Safety devices DC side	• isolation resistance monitoring • overvoltage detection • inverse polarity protection • current limitation • transients / surges (varistors) • overload protection
Safety devices AC side	• current limitation • DC injection protection • short circuit protection (ceramic fuse) • over-/undervoltage and over-/underfrequency monitoring • active anti-islanding algorithm

\* In Italy max. 1500 VA.

\*\* In Belgium max. 3330 VA / Italy max. 3000 VA.

\*\*\* In Germany 4600 VA / Belgium max. 5000 VA, single phase.

Subject to alterations. For our complete product range please visit [www.mastervoltsolar.com](http://www.mastervoltsolar.com)

# SunMaster XS



- Flexible design
- High yield
- Advanced monitoring
- Easy and safe installation
- Reliable

The sun as your very own power system



**MASTERVOLT**  
THE POWER TO BE INDEPENDENT



# More power from the sun

More power from the sun under all conditions, with an exceptional degree of reliability. As one of the pioneers in the grid connected solar industry, Mastervolt has a long track record in developing and manufacturing high-quality inverters that transform solar power into valuable energy. The SunMaster XS series is the result of 20 years of expertise and practical experience, making sure you get the most out of your PV system.

## Flexible design

- Compatible with any type of solar module.
- Country selection via LCD.
- Integrated transformer.

## High yield

- 100% power up to 45 °C.
- High efficiency using HF technology.
- More production due to early startup and late shutdown.
- Unique adaptive cooling technology.

## Advanced monitoring

- Large user-friendly LCD.
- 30 day kWh memory as standard.
- Free plug & play software.
- Extensive monitoring solutions available.

## Easy and safe installation

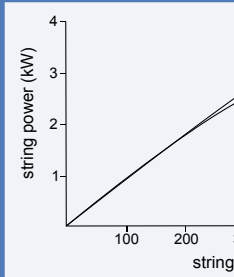
- MC connections.
- Mounting brackets included.
- Integrated DC switch available.
- Lightweight.

## Reliable

- Standard 5 years warranty with optional 10 or 20 years.
- Designed based on a proven Mastervolt concept.
- Long life due to advanced cooling.
- Outstanding price/quality ratio.

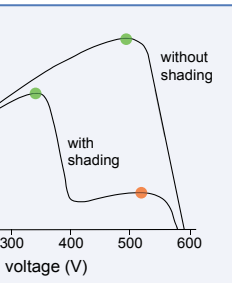
## More information?

Feel free to contact Mastervolt or one of our business partners, or visit [www.mastervoltsolar.com/sunmaster-xs](http://www.mastervoltsolar.com/sunmaster-xs)



# SunMaster XS

## supreme benefits



### High yield

The MPP trackers (99.9%) guarantee a maximum yield from the solar panels, even with low insolation. With a start-up capacity of only 5 Watt the inverters wake up early and go to sleep late. The active cooling ensures a 100% power output for ambient temperatures up to 45 °C.



### Easy and safe installation

A XS2000 only weighs only 10 kg, and the XS6500 just 15 kg. The country setting is programmed on the display and the integrated DC switch also reduces installation time. A mounting bracket is included. The PC monitoring software is plug & play.



### Multifunctional

The exceptionally large voltage range and the HF transformer allow combinations with crystalline, amorphous and thin film PV panels.



### Advanced monitoring

SunMaster XS inverters can be connected to your PC or laptop using the optional PC-Link adapter, and monitored via free Masterlog software. Internet monitoring up to 20 inverters is possible using the optional data loggers.



### Superb value for money

The practical display informs you of the actual situation, and has an energy yield memory of 30 days. An integrated DC switch and standard RS485 data port connection complete the XS package.



### Guaranteed reliability

Besides the standard warranty of 5 years, a warranty of 10 or 20 years is available, underlining our confidence in the product's reliability; an indispensable quality of sustainable power systems.