# SunMaster XS

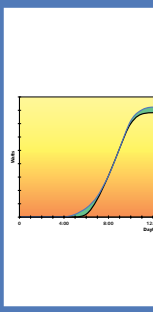
# The sun as your very own power system

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

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.

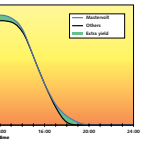
**Easy and safe installation**
- MC connections.
- Mounting brackets included.
- Integrated DC switch available.
- Lightweight.

**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**

# SunMaster **XS**

## supreme **benefits**



### High yield

The MPP trackers (99.9%) ensure a maximum output from the solar panels, even at low light conditions. With a start-up capacity of only 5 W 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, the software is free. PV system monitoring via internet is possible via 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.

# Specifications **SunMaster XS**




| **Model** | **XS2000** | **XS3200** | **XS4300** | **XS6500** |
|---|---|---|---|---|
| Article number | 131012000 | 131013200 | 131014300 | 131016500 |
| **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, hxwxd | 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 $mm^2$ 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 seperation 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

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