

SUNNY BOY 3.0 / 3.6 / 4.0 / 5.0

The new Sunny Boy 3.0 – 5.0 succeeds the globally successful Sunny Boy 3000 – 5000TL and it is more than just an inverter. Smaller, simpler and more convenient with SMA Smart Connected



Sunny Boy 3.0 - 5.0



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The new Sunny Boy 3.0 – 5.0 succeeds the globally successful Sunny Boy 3000 – 5000TL. It is more than just a PV inverter: with the integrated SMA Smart Connected service, it offers all-round comfort for PV system operators and installers alike. The automatic inverter monitoring by SMA analyzes operation, reports irregularities and thus minimizes downtime.

The Sunny Boy is ideally suited to solar power generation in private homes. Thanks to its extremely light design and location of the external connections, the device can be quickly installed and easily commissioned thanks to the intuitive webserver.

Current communication standards mean that intelligent energy management solutions as well as SMA storage solutions can be flexibly added to the inverter at any time.

The integrated service for ease and comfort.

SMA Smart Connected* is the free monitoring of the inverter via the SMA Sunny Portal. If there is an inverter fault, SMA proactively informs the PV system operator and the installer. This saves valuable working time and costs.

With SMA Smart Connected, the installer benefits from rapid diagnoses by SMA. They can thus quickly rectify the fault and score points with the customer thanks to the attraction of additional services.

- ACTIVATION OF SMA SMART CONNECTED

During registration of the system in the Sunny Portal, the installer activates SMA Smart Connected and benefits from the automatic inverter monitoring by SMA.

- AUTOMATIC INVERTER MONITORING

SMA takes on the job of inverter monitoring with SMA Smart Connected. SMA automatically checks the individual inverters for anomalies around the clock during operation. Every customer thus benefits from SMA's long years of experience.

- PROACTIVE COMMUNICATION IN THE EVENT OF FAULTS

After a fault has been diagnosed and analyzed, SMA informs the installer and end customer immediately by e-mail. Everyone is thus optimally prepared for the troubleshooting. This minimizes the downtime and saves time and money. The regular power reports also provide valuable information about the overall system.

- REPLACEMENT SERVICE

If a replacement device is necessary, SMA automatically supplies a new inverter within one to three days of the fault diagnosis. The installer can contact the PV system operator of their own accord and replace the inverter.

- PERFORMANCE SERVICE

The PV system operator can claim compensation from SMA if the replacement inverter cannot be delivered within three days.

SPECIFICATIONS

Technical Data	Sunny Boy 3.0	Sunny Boy 3.6	Sunny Boy 4.0	Sunny Boy 5.0
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Input (DC)

Max. generator power	5500 Wp	5500 Wp	7500 Wp	7500 Wp
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Max. input voltage	600 V			
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MPP Voltage range	110 to 500 V	130 to 500 V	140 to 500 V	175 to 500 V
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Rated input voltage	365 V			
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Min. input voltage / initial input voltage	100 V / 125 V			
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voltage	
Max. input current input A / input B	15 A / 15 A
Max. input current per string input A / input B	15 A / 15 A
Number of independent MPP inputs	2
Strings per MPP input	A: 2 - B: 2

Output (AC)

Rated power (at 230 V, 50 Hz)	3000 W	3680 W	4000 W	5000 W 1)
Max. apparent power AC	3000 VA	3680 VA	4000 VA	5000 VA 1)
Nominal AC voltage / Range	220V, 230V, 240V, / 180 to 280 V			
AC Power frequency / range	50 Hz, 60 Hz / - 5 Hz to + 5 Hz			
Rated grid voltage / Rated power frequency	230 V / 50 Hz			
Max. output current	16 A	16 A	22 A 2)	22 A 2)
Power factor at rated power	1			
Adjustable displacement power factor	0,8 overexcited to 0,8 underexcited			
Feed-in phases / connection phases	1 / 1			

Efficiency

Max. efficiency	97,0 %	97,0 %	97,0 %	97,0 %
European Efficiency	96,4 %	96,5 %	96,5 %	96,5 %

Protective devices

Input-side disconnection point	Standard
Ground fault monitoring	Standard
Grid monitoring	Standard
DC reverse polarity protection	Standard
AC short	Standard

circuit current
capability

All pole sensitive residual current monitoring unit	Standard
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Protection class (as per IEC 62103)	I
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Overvoltage category (according to IEC 60664-1)	III
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General Data

Dimension (W / H / D)	435 / 470 / 176 mm
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Weight	16 Kg
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Operating temperature range	- 25 to 60 °C
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Noise emission, typical	25 dB (A)
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Self-consumption (at night)	1 W
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Topology	Transformerless
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Cooling method	Convection
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Degree of protection (as per IEC 60529)	IP65
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Climatic category (as per IEC 60721-3-4)	4K4H
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Max. permissible value for relative humidity	100% (non-condensing)
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Equipment

DC connection / AC Connection	SUNCLIX / AC Connector
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Display	Via Smartphone, tablet or laptop
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Interfaces	WLAN, Speedwire / Webconnect
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Warranty	5 Years (10, 15 years optional)
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Certificates and approvals	AS 4777, C10/11, CE, CEI 0-2-1, EN 50438, G59/3, G83/2, DIN EN 62109 / IEC 62109, NEN-EN50438, RD1699, SI 4777, UTE C15712, VDE-AR-N 4105, VDE0126-1-1, VFR 2014
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Type designation	SB3.0- 1AV- 40	SB3.6- 1AV- 40	SB4.0- 1AV- 40	SB5.0- 1AV- 40
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1) 4600 W / 4600 VA for VDE-AR-N 4105


2) AS 4777: 21,7 A

DOWNLOADS

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