

SUNNY BOY 3.0 / 3.6 / 4.0 / 5.0 / 6.0

The new Sunny Boy 3.0 – 6.0 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



Sunny Boy 3.0 - 5.0

The new Sunny Boy 3.0 – 6.0 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	Sunny Boy 6.0
Input (DC)					
Max. generator power	5500 Wp	5500 Wp	7500 Wp	7500 Wp	9000 Wp
Max. input voltage			600 V		
MPP Voltage range	110 to 500 V	130 to 500 V	140 to 500 V	175 to 500 V	210 to 500 V
Rated input voltage			365 V		
Min. input voltage / initial input voltage			100 V / 125 V		
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⁾	6000 W
Max. apparent power AC	3000 VA	3680 VA	4000 VA	5000 VA ¹⁾	6000 VA
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⁾	26,1 A
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 %	97,0 %
European Efficiency	96,4 %	96,5 %	96,5 %	96,5 %	96,6 %
Protective devices					
Input-side disconnection point			Standard		
Ground fault monitoring			Standard		
Grid monitoring			Standard		
DC reverse polarity protection			Standard		
AC short circuit current capability			Standard		
All pole sensitive residual current monitoring unit			Standard		
Protection class (as per IEC 62103)			I		
Overvoltage category (according to IEC 60664-1)			III		
General Data					
Dimension (W / H / D)			435 / 470 / 176 mm		
Weight			16 Kg		
Operating temperature range			- 25 to 60 °C		
Noise emission, typical			25 dB (A)		
Self-consumption (at night)			1 W		
Topology			Transformerless		
Cooling method			Convection		
Degree of protection (as per IEC 60529)			IP65		
Climatic category (as per IEC 60721-3-4)			4K4H		
Max. permissible value for relative humidity			100% (non-condensing)		
Equipment					
DC connection / AC Connection			SUNCLIX / AC Connector		
Display			Via Smartphone, tablet or laptop		
Interfaces			WLAN, Speedwire / Webconnect		
Warranty			5 Years (10, 15, 20 years optional)		
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				
Type designation	SB3.0-1AV-41	SB3.6-1AV-41	SB4.0-1AV-41	SB5.0-1AV-41	SB6.0-1AV-41

¹⁾ 4600 W / 4600 VA for VDE-AR-N 4105

²⁾ AS 4777: 21,7 A

DOWNLOADS

CATÁLOGO GENERAL 2020

 [Catalogo-Bornay-0520.pdf](#)

Size: 21.51 MiB
