

SUNNY BOY 1.5 / 2.5

SB 1.5-1VL-40 / SB 2.5-1VL-40



Flexible

- Broad input voltage range
- Integrated WLAN and Speedwire/ Webconnect interface with Webconnect function
- Wired or wireless communication

Communicative

- New communication concept with integrated web server
- System data monitoring possible via WebUI on all smartphones and tablets
- Pulsating LED

Future-Proof

- OptiTrack Global Peak
- Maintenance free, thanks to convection cooling
- Zero feed-in ready
- Direct SMA Energy Meter connection

Easy to Use

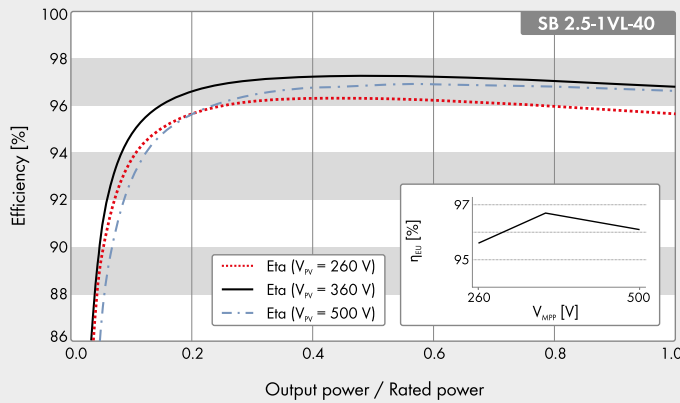
- SUNCLIX DC plug-in system
- Easy installation, low weight and size, transformerless
- Easy commissioning via WebUI

SUNNY BOY 1.5 / 2.5

The new standard for small PV systems

The new Sunny Boy 1.5 / 2.5 is the perfect inverter for customers with small PV systems. Thanks to its broad input voltage range of 80 V to 600 V, its versatility, flexibility in module compatibility and low weight for easy installation are impressive. After smooth commissioning via WebUI, the Sunny Boy 1.5 / 2.5 is ideal for local monitoring via the device's own wireless home network or for online monitoring with Sunny Portal or Sunny Places.

Efficiency Curve



● Standard features ○ Optional – Not available
 Data at nominal conditions
 Last revision: December 2015

Technical Data	Sunny Boy 1.5	Sunny Boy 2.5
Input (DC)		
Max. DC power (at $\cos \varphi = 1$)	1600 W	2650 W
Max. input voltage	600 V	600 V
MPP voltage range	160 V to 500 V	260 V to 500 V
Rated input voltage	360 V	360 V
Min. input voltage / initial input voltage	50 V / 80 V	50 V / 80 V
Max. input current	10 A	10 A
Max. input current per string	10 A	10 A
Number of independent MPP inputs / strings per MPP input	1 / 1	1 / 1
Output (AC)		
Rated power (at 230 V, 50 Hz)	1500 W	2500 W
Max. apparent AC power	1500 VA	2500 VA
Nominal AC voltage	220 V / 230 V / 240 V	220 V / 230 V / 240 V
Nominal AC voltage range	180 V to 280 V	180 V to 280 V
AC power frequency/range	50 Hz, 60 Hz / -5 Hz to +5 Hz	50 Hz, 60 Hz / -5 Hz to +5 Hz
Rated power frequency/rated grid voltage	50 Hz / 230 V	50 Hz / 230 V
Max. output current	7 A	11 A
Power factor at rated power	1	1
Adjustable displacement power factor	0.8 overexcited to 0.8 underexcited	
Feed-in phases/connection phases	1 / 1	1 / 1
Efficiency		
Max. efficiency / European weighted efficiency	97.2 % / 96.1 %	97.2 % / 96.7 %
Protective Devices		
DC-side disconnection point	●	●
Ground fault monitoring / grid monitoring	● / ●	● / ●
DC reverse polarity protection / AC short-circuit current capability / galvanically isolated	● / ● / -	● / ● / -
All-pole sensitive residual-current monitoring unit	●	●
Protection class (according to IEC 62103) / overvoltage category (according to IEC 60664-1)	I / III	I / III
Reverse current protection	Not required	Not required
General Data		
Dimensions (W / H / D)	460 / 357 / 122 mm (18.1 / 14.1 / 4.8 inches)	
Weight	9.2 kg (20.3 lbs)	
Operating temperature range	-40 °C to +60 °C (-40 °F to +140 °F)	
Noise emission, typical	<25 dB	<25 dB
Self-consumption (at night)	2.0 W	2.0 W
Topology	Transformerless	Transformerless
Cooling method	Convection	Convection
Degree of protection (according to IEC 60529)	IP65	IP65
Climatic category (according to IEC 60721-3-4)	4K4H	4K4H
Maximum permissible value for relative humidity (non-condensing)	100 %	100 %
Features		
DC connection / AC connection	SUNCLIX / connector	SUNCLIX / connector
Display	—	—
Interfaces: RS485, Bluetooth®, Speedwire / Webconnect, WLAN	- / - / ● / ●	- / - / ● / ●
Integrated web server	●	●
Warranty: 5 / 10 / 15 / 20 / 25 years	● / ○ / ○ / ○ / ○ / ○	● / ○ / ○ / ○ / ○ / ○
Certificates and approvals (others available upon request)	AS4777.3, C10/11/2012, CEI0-21Int, EN50438, G83/2, IEC61727, IEC62116, IEC62109, NBR16149, NEN-EN50438, NRS097-2-1, VDE-AR-N4105, VDE 0126-1-1, VFR2014	
Type designation	SB 1.5-1VL-40	SB 2.5-1VL-40