

SUNNY BOY 3.0 | 4.0 | 5.0 Smart Connected

SB3.0-1AV-40 | SB4.0-1AV-40 | SB5.0-1AV-40

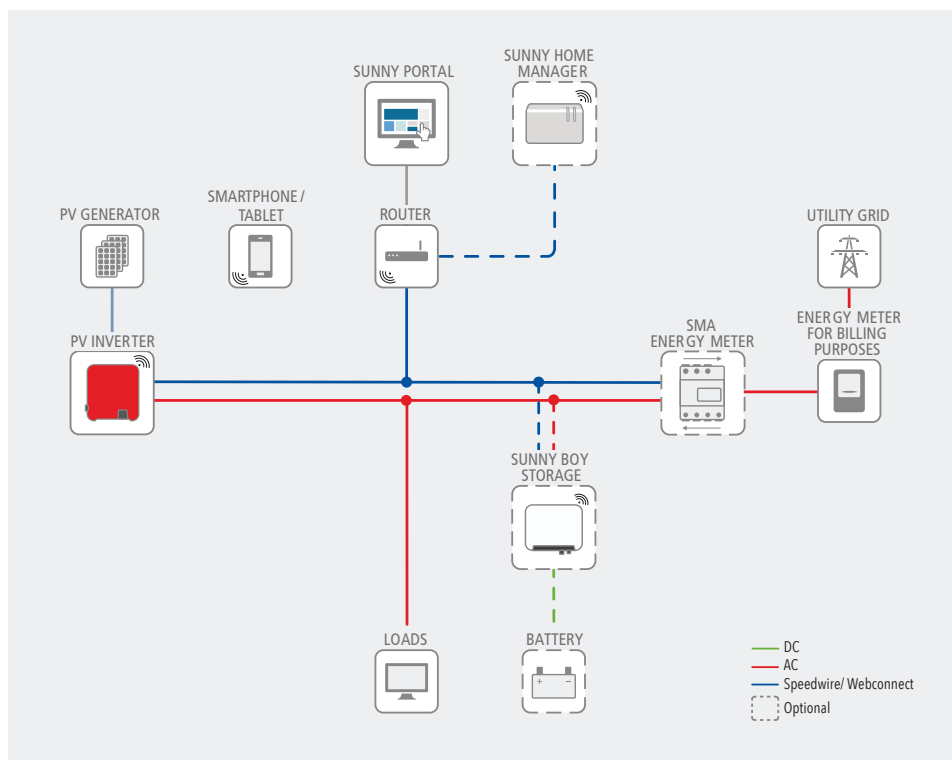
The new Sunny Boy 3.0 – 5.0 Smart Connected Inverters are ideally suited to solar power generation in private homes.

Thanks to its extremely modern user interface, the inverter's performance can be easily monitored on your smart devices both locally and remotely. Current communication standards make the inverter future-proof, meaning home energy storage solutions can be added at any time

- Local monitoring through inverter built-in Web User Interface
- Remote monitoring through Wireless or Ethernet communication
- Improved inverter efficiency
- Reliable and robust operation
- State of the art, transformerless technology
- Solahart 5 years warranty*



SYSTEM PRINCIPLE



Basic Functions

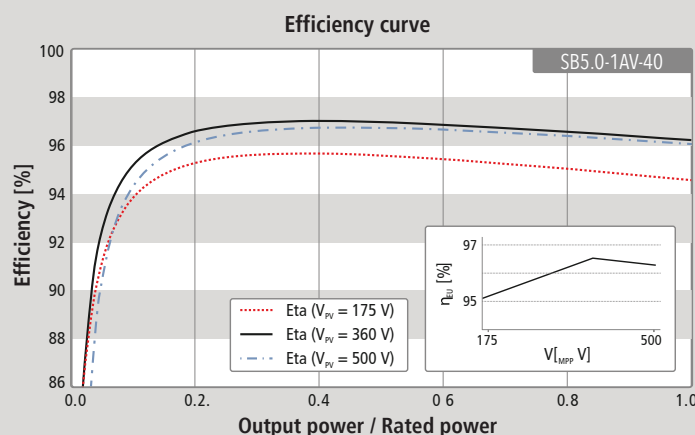
- Solar power generation
- Visualisation in Sunny Portal or Sunny Places
- Local monitoring through Inverter built-in Web User Interface
- Built-in audible earth fault alarm

Expansion Options

- Add battery system to store excess PV energy for maximum self-consumption
- Monitor PV and battery system on one platform

SMA Sunny Boy 3.0 | 4.0 | 5.0

Technical Data	Sunny Boy 3.0	Sunny Boy 4.0	Sunny Boy 5.0
Input (DC)			
Max. DC power (@ $\cos \varphi = 1$)	3200 W	4200 W	5250 W
Max. input voltage	600 V	600 V	600 V
MPP voltage range / Rated input voltage	110 V to 500 V / 365 V	140 V to 500 V / 365 V	175 V to 500 V / 365 V
Min. input voltage / Initial input voltage	100 V / 125 V	100 V / 125 V	100 V / 125 V
Max. input current input A / input B	15 A / 15 A	15 A / 15 A	15 A / 15 A
Max. input current per string input A / input B	15 A / 15 A	15 A / 15 A	15 A / 15 A
Number of independent MPP inputs / strings per input	2 / A:2; B:2	2 / A:2; B:2	2 / A:2; B:2
Output (AC)			
Rated power (@ 230 V, 50 Hz)	3000 W	4000 W	5000 W
Max. apparent AC power	3000 VA	4000 VA	5000 VA
Nominal AC voltage / range	220 V, 230 V, 240 V / 180 V to 280 V		
AC power frequency / range	50 Hz / -5 Hz to +5 Hz		
Rated power frequency / rated grid voltage	50 Hz / 230 V		
Max. output current	16 A	22 A ⁽¹⁾	22 A ⁽¹⁾
Power factor at rated power	1		
Adjustable displacement power factor	0.8 overexcited - 0.8 underexcited		
Feed-in phases / connection phases	1/1		
Efficiency			
Max. efficiency / European efficiency	97% / 96.4%	97% / 96.5%	97% / 96.5%
Protective devices			
Input-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 (as per IEC 62103)/ overvoltage category (as per IEC 60664-1)	I / III		
General data			
Dimensions (W / H / D)	435 mm / 470 mm / 176 mm		
Inverter Weight	16 kg		
Operating temperature range	-25 to +60 °C		
Noise emission (typical)	25 dB(A)		
Self-consumption (at night)	1.0 W		
Topology	Transformerless		
Cooling Method	Convection		
Degree of Protection (According to IEC 60529)	IP65		
Climatic Category (According to IEC 60721-3-4)	4K4H		
Max. permissible value for relative humidity (non-condensing)	100%		
Solahart Warranty*	5 years*		
Features			
DC connection / AC connection	SUNCLIX / AC connector		
Display via smart phone, tablet, laptop	●		
Interface: WLAN, Speedwire / Webconnect	● / ●		
Certificates and approvals (more available on request):	AS 4777, C10/11, CE, CEI 0-21, EN 50438, G59/3, G83/2, DIN EN 62109 / IEC 62109, NEN-EN50438, VDE-AR-N 4105, VDE0126-1-1		
Certificates and approvals (planned):	IEC 61727, RD1699, RD 661, SI 4777, UTE C15-712, VFR 2014, NRS 097-2-1		
Technical Disclaimers			
⁽¹⁾ AS 4777: 21.7 A ● Standard Features ○ Optional Features — Not Available			



* For full details see Solahart Owner's Guide & Installation Instructions.