

SUNNY BOY 240

SB 240-10



High yields

- Maximum efficiency of 95.5 %
- Optimal module use with individual MPP tracking
- Ideal for partially shaded PV plants

Safe

- Galvanic isolation

Reliable

- Rapid diagnosis with access to measured values and event memory
- Maximum electrical endurance thanks to patented electronics design and minimum number of components

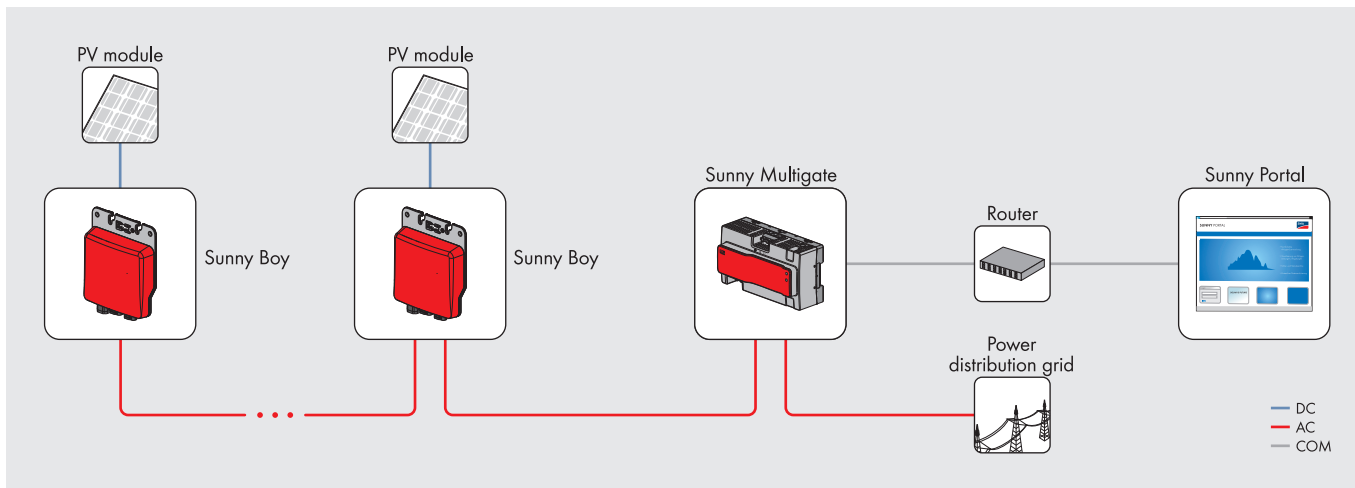
Communicative

- Convenient plant monitoring via Sunny Portal
- Visualization of performance data in real time
- Remote monitoring via Internet

SUNNY BOY 240

Great things come in small packages

Clearly the right inverter for any module: The new micro inverter Sunny Boy 240 rounds off SMA's product range. It is therefore the ideal solution for differently aligned substrings as well as for PV plants with regularly shaded PV modules. In any case, due to their modular design, plants equipped with the Sunny Boy 240 can be realigned and upgraded at any time – in the event of structural modifications, capacity expansion or depending on the financial room for maneuver. In addition, at SMA the micro inverter concept and the well-known string concept can be perfectly combined.



Technical data	Sunny Boy 240
Input (DC)	
Max. DC power (@ $\cos \varphi = 1$)	245 W
Max. input voltage	45 V
MPP voltage range / rated input voltage	23 V ... 32 V / 29 V
Min. input voltage / max. initial input voltage	23 V / 40 V
Max. input current	8.5 A
Max. input current per string	8.5 A
Number of independent MPP inputs / strings per MPP input	1 / 1
Output (AC)	
Rated output power (@ 230 V, 50 Hz)	230 W
Max. apparent AC power	230 VA
Nominal AC voltage / range	230 V / 180 V - 270 V
AC power frequency / range	50 Hz / 45.5 Hz ... 63 Hz
Rated power frequency / rated grid voltage	50 Hz / 230 V
Max. output current	1 A
Power factor at rated power	1
Feed-in phases / connection phases	1 / 1
Efficiency	
Max. efficiency / European weighted efficiency	95.5% / 95%
Protective devices	
Ground fault monitoring / grid monitoring	● / ●
DC reverse polarity protection / AC short-circuit current capability / galvanically isolated	● / ● / ●
General data	
Dimensions (W / H / D)	188.4 / 218.4 / 43.7 mm (7.4 / 8.6 / 1.7 inch)
Weight	1.3 kg (2.9 lb)
Operating temperature range	-40 °C ... +65 °C (-40 °F ... +149 °F)
Topology	HF Transformer
Cooling concept	Convection
Degree of protection (according to IEC 60529)	IP65
Max. permissible value for relative humidity (non-condensing)	100 %
Features	
DC connection	Connector
AC connection	Connector
Certificates and approvals	On request
Version: July 2012	
● Standard feature ○ Optional feature – Not available	
Note: Technical data is preliminary and subject to change	
Type designation	SB 240-10