

# SUNNY BOY 240

SB 240-10



Similar to figure

## Economical

- Optimal module use with individual MPP tracking
- Maximum service life thanks to smart electronics design and minimum number of components

## Safe

- Galvanic isolation
- Integrated grid disconnection point with monitoring in the Sunny Multigate
- Complies with all relevant protection classes and standards

## Communicative

- Integrated Webconnect function to Sunny Portal via Ethernet
- Real-time monitoring on module level
- Remote monitoring via smartphone or tablet
- Free and convenient plant monitoring via Sunny Portal

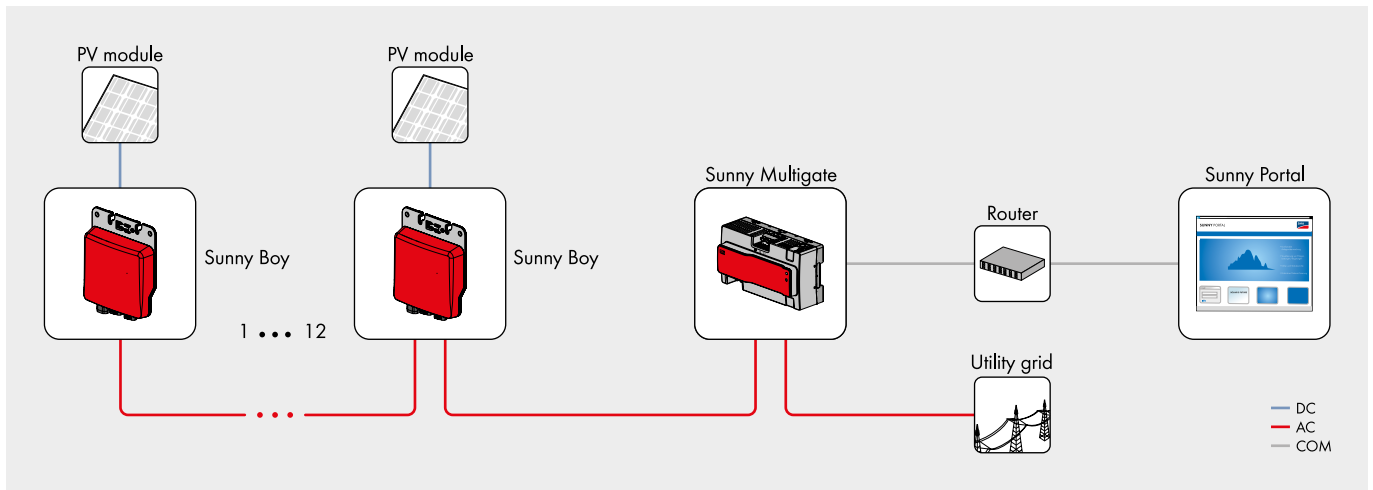
## User-Friendly

- Pre-assembled AC cables
- Selection of DC adapters for the SB 240
- Easy installation

## SUNNY BOY 240

Great things come in small packages

The ideal inverter for a flexible, modular PV system: The Sunny Boy 240, in combination with the Sunny Multigate, is the perfect, easy-to-install solution for various applications such as differently arranged substrings and systems with regularly shaded modules. Due to their modular design, all systems equipped with the Sunny Boy 240 and the Sunny Multigate can be realigned and upgraded at any time – be it due to structural modifications, capacity expansion or depending on financial circumstances. In addition, at SMA the micro inverter concept and the well-known string concept can be perfectly combined.



Technical Data	Sunny Boy 240	Sunny Multigate
<b>Input (DC)</b>		
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	—
Max. number of micro inverters	—	12 x SB 240-10
<b>Output (AC)</b>		
Rated power (@ 230 V, 50 Hz)	230 W	2760 W
Max. apparent AC power	230 VA	2760 VA
Nominal AC voltage / range	230 V / 184 V - 270 V	230 V / 184 V - 270 V
AC power frequency / range	50 Hz / 45.5 Hz ... 63 Hz	50 Hz / 45.5 Hz ... 63 Hz
Rated power frequency / rated grid voltage	50 Hz / 230 V	50 Hz / 230 V
Max. output current	1 A	12 A
Power factor at rated power	1	1
Feed-in phases / connection phases	1 / 1	1 / 1
<b>Efficiency</b>		
Max. efficiency / european weighted efficiency	95.8 % / 95.3 %	—
<b>Protective Devices</b>		
Ground-fault monitoring / grid monitoring	● / ●	- / ●
DC reverse polarity protection / AC short-circuit current capability / galvanically isolated	● / ● / ●	- / ● / -
<b>General Data</b>		
Dimensions (W / H / D)	188 / 218 / 44 mm (7.4 / 8.6 / 1.7 inch)	162 / 90 / 68 mm (6.4 / 3.5 / 2.5 inch)
Weight	1.3 kg (2.9 lb)	0,75 kg (1.5 lb)
Operating temperature range	-40 °C ... +65 °C (-40 °F ... +149 °F)	-40 °C ... +45 °C (-40 °F ... +113 °F)
Noise emission	< 38db(A)	—
Self-consumption (night)	< 0,03W	—
Topology	HF transformer	—
Cooling concept	Convection	Convection
Degree of protection (according to IEC 60529)	IP65	IP20
Max. permissible value for relative humidity (non-condensing)	100 %	—
<b>Communication</b>		
Sunny Portal	—	SMA Webconnect via Ethernet
<b>Features</b>		
DC terminal	Connector	—
AC terminal	Connector	Screw terminal
Interface: Speedwire/Webconnect	—	●
Certificates and approvals 01/2014	VFR2013, PPC, EN 50438, NEN-EN50438, EN 50438-CZ C10/11/2012, VDE0126-1-1, VDE-AR-N-4105, TR-3.2.1-AR-N-4105, R.D.1699, Other Standard	
Last updated: 02/2014		
● Standard features ○ Optional features — Not available		
Note: Technical data is preliminary and subject to change		
Type designation	SB 240-10	MULTIGATE-10