

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 communicates with Sunny Portal via Ethernet
- Realtime monitoring on the module level
- Remote monitoring via smartphone or tablet
- Free and convenient PV system monitoring via Sunny Portal

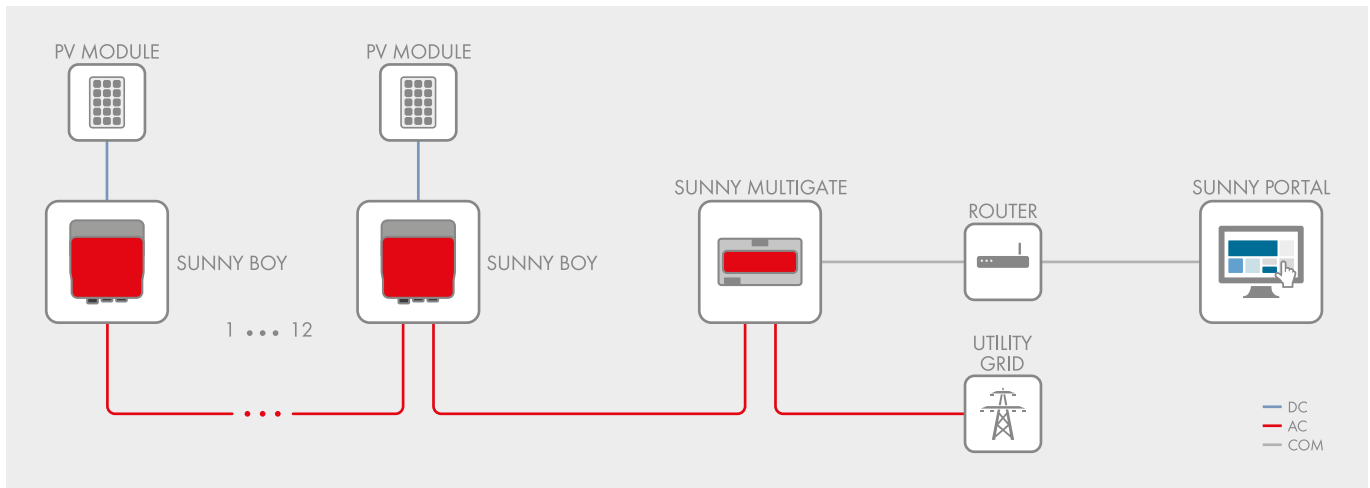
User-Friendly

- Pre-assembled AC cables
- Selection of DC adapters for most commercially available PV modules
- Easy installation

SUNNY BOY 240

Great things come in small packages

This is the ideal inverter for a flexible, modular PV system: Combined with the Sunny Multigate, the Sunny Boy 240 is an easy-to-install solution. It's applications range from different substrung arrangements to systems with regularly shaded modules. Due to their modular design, systems equipped with both the Sunny Boy 240 and the Sunny Multigate can be realigned or upgraded at any time, depending on structural modifications, expansion of system size or a change in financial circumstances. The micro inverter and well-known string concept have also been seamlessly combined by SMA.



Recommended photovoltaic modules
 Max. power at STC 300 W
 Voltage at max. power at STC 26 V to 32 V
 Max. DC short-circuit current at STC 12 A

Technical Data	Sunny Boy 240	Sunny Multigate
Input (DC)		
Max. input voltage	45 V	–
MPP voltage range / rated input voltage	23 V - 39 V / 29.5 V	–
Min. input voltage / max. initial input voltage	23 V / 40 V	–
Max. input current	8.5 A	–
Max. number of micro inverters	–	12 x SB 240-10
Output (AC)		
Rated power (at 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 to 63 Hz	50 Hz / 45.5 Hz to 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
Efficiency		
Max. efficiency / European efficiency	95.8% / 95.3%	–
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 / 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 °to +65 °C (-40 °to +149 °F)	-40 °to +45 °C (-40 °to +113 °F)
Noise emission	< 38 dB(A)	–
Self-consumption (at night)	< 0.03 W	–
Topology	HF transformer	–
Cooling method	Convection	Convection
Degree of protection (according to IEC 60529)	IP65	IP20
Max. permissible value for relative humidity (non-condensing)	100%	–
Communication		
Sunny Portal	–	SMA Webconnect via Ethernet
Features		
DC terminal	Connector	–
AC terminal	Connector	Screw terminal
Interface: Speedwire / Webconnect	–	●
Certificates and approvals 01/2014	VFR2014, PPC, EN 50438:2007(EU, CZ, NEN), C10/11:2012, VDE0126-1-1, VDE-AR-N 4105, TR-3.2.1, R.D.1699/R.D.413, CEI0-21, AS4777, TOR D4, G83/2, G59/3	
Last update: September 2014		
● Standard features ○ Optional features – Not available		
Note: Technical data is preliminary and subject to change		
Type designation	SB 240-10	MULTIGATE-10