**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 substring 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.

**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
- Real-time 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
Technical Data

**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
- 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

**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: ● / ●
- Protective Devices: – / ●

**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 °C to +65 °C (-40 °F to +149 °F) / -40 °C to +45 °C (-40 °F to +113 °F)
- Noise emission: < 38 dB(A)
- Self-consumption (at night): <0.03 W
- Topology: HF transformer
- Cooling method: Convection
- Degree of protection (according to IEC 60529): IP65 / IP20
- Max. permissible value for relative humidity (non-condensing): 100%
- Max. permissible value for relative humidity (non-condensing): –

**Communication**

- Sunny Portal: –
- SMA Webconnect via Ethernet

**Features**

- DC terminal: Connector
- AC terminal: Connector / Screw terminal
- Interface: Speedwire / Webconnect
- Last update: September 2014
- ● Standard features ○ Optional features – Not available

**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

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**Type designation**: SB 240-10 / MULTIGATE-10

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