

SMA Sunny Boy Smart Energy 5.8kW (SBSE5.8-US-50)



Price: CAD \$4,399.00

SKU: SMA-SBSE5.8-US-50

Product Categories: [Grid-Tie](#), [Hybrid](#), [Hybrid Inverters: 4-10kW](#), [Inverters](#), [Shop](#), [String Inverters: 3-9kW](#)

Product Tags: [5.8kw](#), [6kw](#), [backup](#), [battery backup](#), [canada](#), [hybrid](#), [hybrid inverter](#), [inverter](#), [SBSE5.8-US-50](#), [SBSE5.8-US-50 canada](#), [sma](#), [sma SBSE5.8-US-50](#), [sma smart energy](#)

Product Page:

<https://www.modernoutpost.com/product/sma-sunny-boy-smart-energy-5-8kw-sbse-5-8-us-50/>

Product Summary

The highly anticipated SMA Sunny Boy Smart Energy 5.8kW hybrid inverter. It's the hybrid inverter at the heart of the SMA Energy System, with three backup options.

This groundbreaking inverter combines the functions of a PV and battery inverter into a single unit, keeping electrical upgrades to a minimum. **SBSE5.8-US-50**

Product Description

The highly anticipated SMA Sunny Boy Smart Energy 5.8kW hybrid inverter. It's the hybrid inverter at the heart of the SMA Energy System, with three backup options. This groundbreaking inverter combines the functions of a PV and battery inverter into a single unit, keeping electrical upgrades to a minimum. **SBSE5.8-US-50**

The SMA Sunny Boy Smart Energy 5.8kW features modular add-on options including the new SMA Energy Meter and SMA Backup Secure that enhance the systems' performance and offer peace of mind.

BackUp Options

SMA BACKUPSECURE

Secured power supply Access up to 1,900 W of power with a secure outlet connected directly to your inverter.

SMA BACKUPSELECT

Selected power supply Get up to 3,800 W of power, with or without a battery, automatically sent to select loads in your home when the grid goes down.

SMA BACKUPHOME

Reliable power supply When paired with a battery, store and access the full power of your PV system to power your home in the event of grid failure.

Sunny Boy Smart Energy inverters are packed with new technology, including an integrated system manager, SMA 360° and Energy apps, SunSpec RSD transmitter, SMA ShadeFix optimization (with 3 MPPTs), SMART Connected and more. The Sunny Boy Smart Energy shines with its high-speed battery charging capability.

Conventional charging performance is challenged during transitional months by few hours of sunshine and plenty of cloud cover, but Sunny Boy Smart Energy's fast charging allows more solar power to be harvested and stored in those few hours, ready to power loads and reduce energy costs.

Trust in SMA America, your leader in residential energy - building reliable, high

performance and innovative solutions, with support you can depend on. For over 40 years, SMA has made using solar energy easier and more efficient. The SMA Energy System Home continues this tradition.

SMA Smart Energy 5.8 Features

Ultimate flexibility

Larger power classes

Up to 4 MPPT optimizing channels

200% DC/AC design capability

Hybrid, PV only, and AC coupling in one

Easy installation

Smaller and lighter, eases mounting

2-in-1 solution that saves time, wall space, and electrical upgrades

SunSpec Certified Rapid Shutdown transmitter built-in

Complete reliability

No need for complex microinverters and optimizers

10-year warranty, extendable to 25

Energy security with or without the need for a battery

Quick commissioning

Intuitive SMA 360° app saves installers time and money

Scan, tap, and connect multiple devices from your mobile device or tablet

Step-by-step commissioning guide

SMA Sunny Boy Smart Energy 5.8kW Specifications In Brief

Model: SBSE5.8-US-50 PV Input

Max. PV array power (200% oversizing) : 11,520W

Max. DC voltage : 600V DC

Rated MPP voltage range :180 V - 480 V

Min. / Startup DC Voltage : 60V DC / 66V DC

Max. usable current input per MPPT : 15A

Max. short-circuit current input per MPPT : 30 A (the sum at all inputs must not exceed 60 A)

Independent MPPT inputs / inputs per MPPT : 3 / 1

Connection of MPPT inputs in parallel : A / B

Battery (Optional)

Battery type : LiFePO4 (Compatible models to be highlighted here)

Voltage range : 90 V to 500 V

AC Output

Max. apparent AC power : 5760VA

AC Rated power (at 240 V, 60 Hz) : 5760W

AC Rated power (at 208 V, 60 Hz) : 4992W

AC voltage rated and range : 240 V (211 V to 264 V) or 208 V (183 V to 229 V)

AC grid frequency / range : 60 Hz (55 Hz to 66 Hz)

Max. rated output current : 24A

Breaker (overcurrent protection) : 30A

Efficiency

Max. efficiency : 98.1%

CEC efficiency (240/208V) : 97.5% / 97%

Protective devices

DC disconnect / DC reverse polarity protection

DC AFCI arc-fault protection

Ground fault monitoring / Grid monitoring

AC short circuit current capability

All-pole-sensitive residual-current monitoring unit Protection class

Overvoltage category grid / battery / PV General data

Physical

Dimensions (W / H / D) : 50 x 58.7 x 23.6cm (19.7 x 23.1 x 9.3 in)

Weight : 17.54kg (38.6 lb)

Operating temperature range : -25 °C to +60 °C

Topology / cooling method : Transformerless / Natural Convection (no fans)

Warranty : 10 / +5 / +10 / +15 years Certificates and approvals

SMA Backup Secure** (grid outage mode, with or without battery)

Rated power (at 120 V, 60 Hz) : 1920W

Nominal AC voltage : 120V AC

AC grid frequency : 60Hz

Activation mode : Manual

** SMA Backup Start module required to enable SMA Backup Secure in installations bound by CEC/NEC rapid shutdown requirements.

Document Downloads

Brochure Spec Sheet

...

About SMA Solar Technology AG (Germany)

With our products and solutions, we are paving the way for a climate-friendly, decentralized energy supply of the future. Through environmentally friendly and resource-saving economic activity, the use of renewable energies, transparency, fairness, and an honest business policy, we are taking a stand for sustainability. In our day-to-day working life. Within the company. And far beyond.

With over 40 years of experience in PV technology and 30 years of experience in storage technology, SMA is a brand you can rely on. Through their work, more than 3,600 SMA experts in 18 countries are now driving the energy transition forward with reliable, high-performance equipment.

Product Attributes

- Dimensions: 50 × 60 × 24 cm
- Weight: 18 kg