

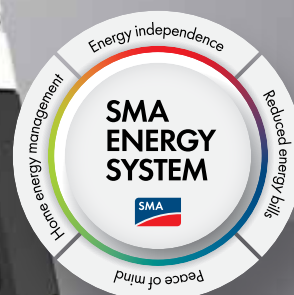


SUNNY BOY STORAGE 3.8-US / 5.0-US / 6.0-US

SBS3.8-US-10 / SBS5.0-US-10 / SBS6.0-US-10



**THE CORNERSTONE OF
THE SMA ENERGY SYSTEM**



Versatile

- AC coupled for new PV systems or retrofitting existing systems
- Compatible with many leading high-voltage batteries

Simple & Flexible

- Quick and easy installation
- Multiple configuration options with the ability to expand

Innovative

- High level of system integration provides unmatched monitoring and control
- Three separate DC inputs allow for maximum power and energy capacity

Multiple Use Cases

- Backup power options for whole home or protected loads
- Solutions for energy management, zero export, and demand charge avoidance

SUNNY BOY STORAGE 3.8-US / 5.0-US / 6.0-US

The intelligent energy management solution

The Sunny Boy Storage battery inverter has been precisely engineered to serve as the intelligent interface between PV, the electrical grid and industry-leading high-voltage batteries. Its AC coupled architecture enables installation at any point in time, providing greater flexibility and giving installers the opportunity to generate new business with existing customers. Along with its ability to address the large retrofit market of existing PV systems, it also delivers the most cost-effective, versatile and innovative residential storage solution available. Additionally, up to 2000 W of convenience power can now be achieved in the event of a grid outage during both day and night thanks to SMA's proprietary Backup Lite feature. Whole home backup is also available with the SMA Automatic Backup Unit.

| Technical data | Sunny Boy Storage 3.8-US | Sunny Boy Storage 5.0-US | Sunny Boy Storage 6.0-US |
|--|---|--------------------------|--------------------------|
| AC connection | | | |
| AC nominal power | 3800 W | 5000 W | 6000 W |
| Backup overload @ 25° C for 1 minute** | 4800 W | 6250 W | 7680 W |
| Maximum instantaneous backup power (100 ms)** | 5800 VA | 7500 VA | 9300 VA |
| Nominal AC voltage / range | 240 V / 211 - 264 V | | |
| AC grid frequency / range | 60 Hz / 50 Hz | | |
| Rated power frequency / rated grid voltage | 60 Hz / 240 V | | |
| Adjustable displacement power factor | 0.8 overexcited - 0.8 underexcited | | |
| Feed-in phases / line connections | 1 / 2 | | |
| Harmonics | < 4 % | | |
| Secure Power Supply – Backup Lite | | | |
| Maximum output power | 2000 W | | |
| Maximum output current | 16 A | | |
| Nominal AC voltage | 120 V | | |
| Battery DC Input | | | |
| Max. DC voltage | 600 V | | |
| DC voltage range/ DC rated voltage | 100 V - 550 V / 360 V | | |
| Min. DC voltage / start DC voltage | 100 V / 100 V | | |
| Max. DC current power input / # of inputs | 10 A / 3 | | |
| Max. short-circuit current per input | 40 A | | |
| Compatible battery type | Li-Ion* | | |
| Efficiency | | | |
| Max. efficiency | 97.50% | | |
| Protective devices | | | |
| DC reverse polarity protection | ● | | |
| Ground fault monitoring / Grid monitoring | ● | | |
| AC short circuit protection | ● | | |
| All-pole sensitive residual current monitoring unit (RCMU) | ● | | |
| Protection class / overvoltage category | I / IV | | |
| General data | | | |
| Dimensions (W / H / D) in mm (in) | 535 x 730 x 198 (21.1 x 28.5 x 7.8) | | |
| Packing dimensions (W / H / D) in mm (in) | 600 x 800 x 300 (23.6 x 31.5 x 11.8) | | |
| Weight | 26 kg (57 lb) | | |
| Packaging weight | 30 kg (66 lb) | | |
| Operating temperature range | -25 C° to 60° C (-13° F to 140° F) | | |
| Maximum operating altitude above mean sea level (MSL) | 3000 m | | |
| Noise emission (typical) | < 36 dB(A) | | |
| Internal power consumption at idle | < 5 W | | |
| Topology | Transformerless | | |
| Cooling concept | Convection | | |
| Enclosure type rating | NEMA 3R | | |
| Features | | | |
| Secure Power Supply – Backup Lite | ● | | |
| Full backup functionality** | ○ | | |
| Interfaces | Ethernet / WLAN | | |
| Communication protocols | Modbus (SMA/Sunspec) / Webconnect | | |
| Battery communication | CAN bus | | |
| Approved energy meters | Continental Control System, LLC - WNC-3Y-208-MB, etc. (See www.SMA-America.com for more info) | | |
| Warranty: 10 / 15 / 20 years | ●/○/○ | | |
| Certificates and approvals | UL 1741 SA, UL 9540, CSA C22.2 No. 107.1-1, UL 1998, IEEE 1547, PCC Part 15 (Class A & B) CA Rule 21, HECO Rule 14H SRD v1.1 | | |
| *Battery types approved by SMA e.g. LG Chem, BYD, etc. (See www.SMA-America.com) **Requires SMA Automatic Backup Unit (SBS-ABU-200-US-10) | | | |
| Type designation | SBS3.8-US-10 | SBS5.0-US-10 | SBS6.0-US-10 |
| ● Standard features ○ Optional features – Not available Data at nominal conditions | | | |

