

SBS2.5-1VL-10



## Flexible

- Multiple configuration options and extendable PV design
- For new and existing systems
- Compatible with all lithium-ion batteries

## Efficient

- Most economical AC-connected system on the market
- 97% efficiency

- Integrated dynamic active power limitation for PV inverters

## Simple

- One-person installation
- WLAN and intuitive web interface
- Transparency thanks to its direct connection to Sunny Portal / Sunny Places

## SUNNY BOY STORAGE 2.5

Independent power generation for your home

The Sunny Boy Storage is the battery inverter for high-voltage batteries from all reputable manufacturers. With a charge and discharge power of 2.5 kW, it is ideally suited to coping with the electricity demand of a private household. The device combines the flexibility of the AC coupling with the advantages of high-voltage technology, enabling a significant reduction in system and installation costs. Thanks to the integrated web server and the direct portal access, commissioning is simple and the energy flows in the household are as transparent as possible.

However electric current is produced and consumed – whether in existing or new PV systems, using wind energy, in CHP plants or to ensure a secure supply in the event of grid failures – the Sunny Boy Storage does it all, both today and in the future, because systems with the Sunny Boy Storage can be flexibly extended at any time on both the generator and battery sides.

| Technical data                                                                                 | Sunny Boy Storage 2.5                                                                                                         |
|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>AC connection</b>                                                                           |                                                                                                                               |
| Rated power (at 230 V, 50 Hz)                                                                  | 2500 W                                                                                                                        |
| Max. apparent AC power                                                                         | 2500 VA                                                                                                                       |
| Nominal AC voltage / range                                                                     | 220 V, 230 V, 240 V / 180 V to 280 V                                                                                          |
| AC power frequency / range                                                                     | 50 Hz, 60 Hz / -5 Hz to +5 Hz                                                                                                 |
| Rated power frequency / rated grid voltage                                                     | 50 Hz / 230 V                                                                                                                 |
| Max. AC current                                                                                | 11 A                                                                                                                          |
| Power factor at rated power                                                                    | 1                                                                                                                             |
| Adjustable displacement power factor                                                           | 0.8 overexcited to 0.8 underexcited                                                                                           |
| Feed-in phases / connection phases                                                             | 1 / 1                                                                                                                         |
| <b>Battery DC input</b>                                                                        |                                                                                                                               |
| Max. DC power (at $\cos \varphi = 1$ )                                                         | 2650 W                                                                                                                        |
| Max. DC voltage                                                                                | 500 V                                                                                                                         |
| DC voltage range / DC rated voltage                                                            | 100 V to 500 V / 360 V                                                                                                        |
| Min. DC voltage / start DC voltage                                                             | 100 V / 100 V                                                                                                                 |
| Max. DC current                                                                                | 10 A                                                                                                                          |
| Max. DC short-circuit current                                                                  | 18 A                                                                                                                          |
| Battery type                                                                                   | Li-ion*                                                                                                                       |
| <b>Efficiency</b>                                                                              |                                                                                                                               |
| Max. efficiency / European weighted efficiency                                                 | ~97.0% / ~96.5%                                                                                                               |
| Self-consumption with no load / standby                                                        | ≤ 10 W / ≤ 2 W                                                                                                                |
| <b>Protective devices</b>                                                                      |                                                                                                                               |
| Input-side disconnection point                                                                 | —                                                                                                                             |
| Ground fault monitoring / grid monitoring                                                      | ● / ●                                                                                                                         |
| DC reverse polarity protection / AC short-circuit current capability / galvanically isolated   | — / ● / —                                                                                                                     |
| All-pole-sensitive residual-current monitoring unit                                            | ●                                                                                                                             |
| Protection class (according to IEC 62103) / overvoltage category (according to IEC 60664-1)    | I / III                                                                                                                       |
| <b>General data</b>                                                                            |                                                                                                                               |
| Dimensions (W / H / D)                                                                         | 450 / 357 / 122 mm (17.7 / 14.1 / 4.8 inches)                                                                                 |
| Inverter weight                                                                                | 9.2 kg (20.3 lbs)                                                                                                             |
| Operating temperature range in battery operation                                               | -40 °C to +60 °C (-40 °F to +140 °F)                                                                                          |
| Noise emission, typical                                                                        | < 25 dB                                                                                                                       |
| Topology                                                                                       | Transformerless                                                                                                               |
| Cooling method                                                                                 | Convection                                                                                                                    |
| Degree of protection (according to IEC 60529) / climatic category (according to IEC 60721-3-4) | IP65 / 4K4H                                                                                                                   |
| Max. permissible value for relative humidity (non-condensing)                                  | 1                                                                                                                             |
| <b>Features/function/accessories</b>                                                           |                                                                                                                               |
| DC connection / AC connection                                                                  | Connector/connector                                                                                                           |
| Integrated web server                                                                          | ●                                                                                                                             |
| Interfaces                                                                                     | Ethernet/WLAN                                                                                                                 |
| Communication protocols                                                                        | Modbus (SMA, Sunspec), Webconnect                                                                                             |
| Battery communication                                                                          | CAN Bus                                                                                                                       |
| Integrated dynamic active power limitation                                                     | ●                                                                                                                             |
| Warranty: Ten years                                                                            | ●                                                                                                                             |
| Certificates and approvals (more available upon request)                                       | CE, DIN EN 62109-1 / IEC 62109-1, VDE-AR-N4105                                                                                |
| Certificates and approvals (currently being planned)                                           | AS4777, C10/11/2012, CEI0-21, NEN 50438, VFR 2014, G83/2, G59/3<br>EN50438, RD 1699, VDE0126-1-1, PPC, NRS097, PPDS, IEC61727 |
| Sunny Home Manager / SMA Energy Meter                                                          | ○ / ○                                                                                                                         |
| Retrofittable battery-backup function                                                          | Q4 2016                                                                                                                       |
| * SMA-approved batteries, e.g. Tesla Powerwall Daily, etc.                                     |                                                                                                                               |
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|                                                                                                |                                                                                                                               |
| ● Standard features   ○ Optional features   — not available                                    |                                                                                                                               |
| Data in nominal conditions                                                                     |                                                                                                                               |
| Provisional status January 2016                                                                |                                                                                                                               |
|                                                                                                |                                                                                                                               |
| Type designation                                                                               | SBS2.5-1VL-10                                                                                                                 |