



SUNNY BOY STORAGE AUTOMATIC BACKUP UNIT

SBS-ABU-200-US-10



IMAGE FOR ILLUSTRATIVE PURPOSES ONLY

Versatile

- Suitable for many use cases including whole home backup power
- Up to three high-voltage batteries can be connected in parallel to a single Sunny Boy Storage

Robust

- 200 Amp rated bus allows for direct line-side connection to large home electrical panels
- Up to 5 kVA of unbalanced load
- Outdoor rated for harsh environments

Simple Installation

- Pre-wired and tested to make for easy commissioning
- Plug-n-play installation with Sunny Boy Storage inverter
- Easy setup and commissioning via Sunny Boy Storage webUI

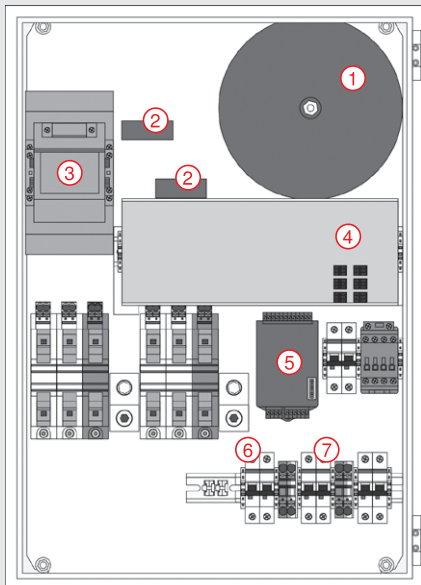
Cost-effective

- AC coupled architecture allows for new PV or retrofit installations
- Fully integrated solution reduces balance of system costs

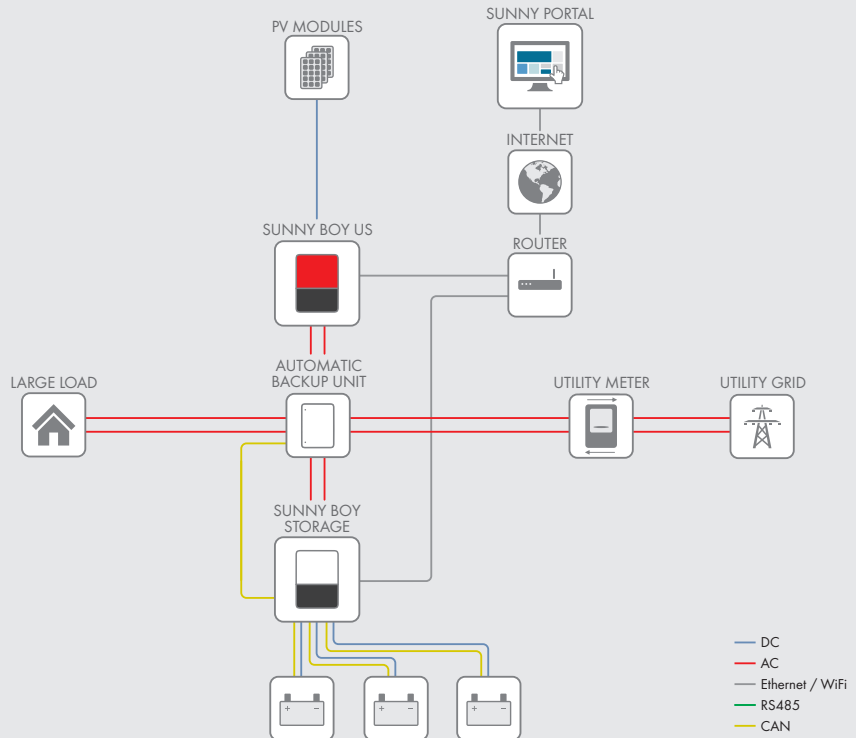
SUNNY BOY STORAGE AUTOMATIC BACKUP UNIT

The fully integrated solution for whole home backup power

While alternative backup systems offer merely a transfer switch and require additional hardware purchases, the new SMA Automatic Backup Unit (ABU) is a truly integrated solution for whole home backup power. The ABU consists of several components. The first is a 200 Amp rated contactor, which automatically disconnects the home energy system from grid power during a power outage. The integrated autotransformer balances up to 5 kVA of imbalance across phases, reducing the potential for system interruption during backup mode operation due to imbalanced loads within the home. The solution also includes built-in energy consumption metering with pre-installed current transformers, eliminating the need for additional hardware and labor. Two 50 Amp breakers are included for landing PV and energy storage inverter output, which also reduces hardware needs. Finally, the ABU features an SMA backup controller, which manages and stabilizes the microgrid by monitoring solar generation, load consumption, and battery state-of-charge.



- ① Autoformer
- ② Current transformers (pre-installed)
- ③ Grid contactor switch
- ④ Backup unit controller
- ⑤ Energy meter (built-in)
- ⑥ Circuit breaker for Sunny Boy Storage
- ⑦ Circuit breaker for PV inverter



- DC
- AC
- Ethernet / WiFi
- RS485
- CAN

Technical data	SUNNY BOY STORAGE AUTOMATIC BACKUP UNIT
Connection to utility grid and household distribution	
Rated grid voltage	240 V
Output nom. voltage of line conductor	240 V / 120 V
Rated grid frequency	60 Hz
Maximum input and output current	200 A
Continuous unbalanced current in backup mode at 120 V	41.6 A
Maximum surge power (60 seconds)*	7680 VA
Maximum instantaneous power (100 ms)*	9300 VA
Connection of PV inverters and battery inverters	
Maximum overcurrent protection for PV inverter	50 A
Maximum overcurrent protection for battery inverter	50 A
General data	
Dimensions (W / H / D)	500 mm x 700 mm x 250 mm (19.69 in x 27.56 in x 9.84 in)
Weight	60 kg (133 lb.)
Operating temperature range	-25 °C to 55 °C (-13 °F to 131 °F)
Maximum ambient temperature (without derating)	45 °C (113 °F)
Enclosure type rating in accordance with UL 50E	NEMA 3R
Protection class	1
Grid configuration	240 V : 120 V split-phase system
Cooling method	Convection
Features	
Overcurrent protection for inverters included	●
Energy meter and current transformers included	●
Blackstart capable	●
Communication protocols to SBS-US	CAN bus
Certificates and approvals	UL 1741
Warranty	
Standard	10 years
* With SBS6.0-US at 25 °C	
● Standard features ○ Optional features — Not available Data at nominal conditions	
Type designation	SBS-ABU-200-US-10

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