/ BU-SBSE-1P-50



SMA Backup 1P

Battery backup power supply and automatic switchover device between grid-connected and off-grid operation

Flexible
- Compatible with the Sunny Boy Smart Energy in single-phase installations
- Protection of all single-phase loads (max. 63 A final fuse)
- Adjustable switching times between battery backup and parallel grid operation

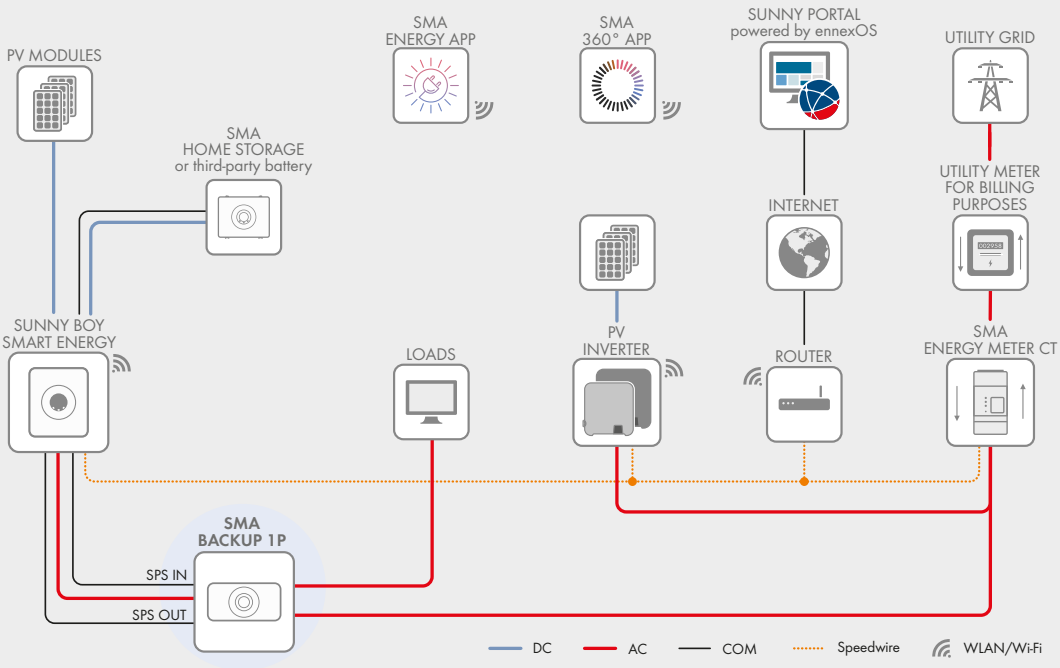
Easy installation
- External box for simple and flexible installation
- Can be retrofitted to existing systems

Convenience and safety
- Automatic supply of the loads in the event of a grid failure through grid failure detection
- Low self-consumption in parallel grid operation (below 1 W)

The SMA Backup 1P solution offers a powerful, automatic and reliable battery backup solution for single-phase households.

The SMA Backup 1P solution supplies all loads in the house reliably and automatically via the Sunny Boy Smart Energy hybrid inverter (SBSEx.x-50). The external box can be flexibly installed or retrofitted into existing systems and already contains an integrated backup fuse for the inverter (L and N).
It also offers space for the installation of external RCD, overvoltage protection (DC-SPD), the Sunny Home Manager or SMA Energy Meter CT. During parallel grid operation, the energy consumption is extremely low and is less than 1 W. The automatic switchover enables a smooth transition between grid and battery-backup operation and can be set to switchover times between 0 s and 600 s. This ensures a complete energy supply for the household with high output and reliable performance. Especially in combination with an SMA Home Storage battery, the power supply is guaranteed even when the sun is not shining.

System overview



Technical Data	SMA Backup 1P
Grid-parallel operation	
Input voltage	230 V
AC grid frequency / range	50 Hz / 60 Hz
Maximum pre-fuse on the grid side	63 A
Battery backup	
Compatible with the following inverters	SBSE3.6-50 / SBSE4.0-50 / SBSE5.0-50 / SBSE6.0-50
Rated power (at 230 V, 50 Hz):	7300 W
Max. apparent AC power (at 230 V, 50 Hz)	7300 VA
Output power / Output apparent power < 100 ms	11040 W / 11040 VA
Output power / Output apparent power < 30 s	9200 W / 9200 VA
Nominal AC voltage	230 V
AC frequency	50 Hz
Switching mode	automatically
Switching times (adjustable parameters):	
Parallel grid operation in backup system	0 s[1] to 600 s (default: 5 s)
Backup system in parallel grid operation	0 s[1] to 600 s (default: 5 s)
General Data	
Dimensions (W / H / D)	506 mm x 260 mm x 236 mm
Weight	6.16 kg
Installation site	Indoor / outdoor
Mounting type	Wall mounting bracket
Degree of protection (as per IEC 60529)	IP65
Operating temperature range	−40°C to +55°C
Storage / transport temperature range	−40°C to +70°C (−40°F to +158°F)
Maximum height above mean sea level	3000 m
Maximum permissible value for relative humidity (non-condensing)	0% to 100%
Self-consumption in parallel grid operation	<1 W
Warranty	2 years
Model type number	BU-SBSE-1P-50

● Standard features ○ Optional features – Not available Data in nominal conditions Last revision: 04/2025 1) Actual switching time ≈100 ms

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