

SUNNY BACKUP SETS M / L / XL

Simple

- > Can easily be added to existing PV systems
- > Pre-configured sets for different power ranges

Affordable

- > Allows for a cost effective battery pack

Flexible

- > Applicable in both single and three phase systems
- > Modular
- > Power range from 5 to 100kW

Efficient

- > Allows the power grid to charge the battery pack
- > PV-efficiency remains high

Reliable

- > Switches automatically to backup mode within 20 milliseconds
- > Meets AS4777 standards
- > Backed by a 5yr SMA manufacturers warranty



SUNNY BACKUP SETS

Solar power when the grid is down

The new Sunny Backup-System allows PV power plant owners to use their existing system for continuous power, even during grid outages. The Sunny Backup automatically switches to island supply within 20 milliseconds. The system remains efficient and effective in normal or backup modes. Due to its superior design, only a minimal amount of battery packs are necessary for full support. SMA offers the Sunny Backup products in different power ranges, from 5 kW to 100 kW, – easy to install easy to expand – it is modular and backed with a 5 year warranty. The Sunny Backup System can also be used to realise a decentralised grid stabilisation. This battery grid feed feature enables the user to feed power from the batteries into the electrical grid when required.

Technical Data

SUNNY BACKUP SETS M / L / XL

	Sunny Backup Set M	Sunny Backup Set L	Sunny Backup Set XL
General information			
Number of phases	1-phase	3-phase	3-phase
Nominal voltage / frequency	230 V / 50 Hz	3 x 230 V / 400 V / 50 Hz	3 x 230 V / 400 V / 50 Hz
Number of Sunny Backup 5000 (SBU)	1	3	6 / 9 / 12
Switching unit (AS-Box)	AS-Box M	AS-Box L	AS-Box XL
Permitted grid system	TN-C / TN-S	TN-C / TN-S	TN-C / TN-S
PV-System			
Nom. AC-PV Power / AC-PV-current	5.7 kW / 25 A	30 kW / 3 x 44 A	110 kW / 3 x 160 A
Independent disconnection device (AS 4777)	yes	yes	yes
Consumers			
Nom. power / current in grid operation	8 kW / 35 A	44 kW / 3 x 63 A	110 kW / 3 x 160 A
Max. backup power (nominal / 30 min. / 1 min)	5 kW / 6.5 kW / 8.4 kW	15 kW / 19.5 kW / 25.2 kW	2/3/4x(15 kW/19.5 kW/25.2 kW)
Battery			
Type	Fleece battery (AGM)	Fleece battery (AGM)	Fleece battery (AGM)
Nominal voltage (array / block)	48 V / 12 V	48 V / 12 V	48 V / 12 V
Energy / capacity (C10)	6.7 kWh / 142 Ah	13.4 kWh / 284 Ah	2/3/4 x (13.4 kWh / 284 Ah)
Battery grid feed	5 kW	15 kW	no
Number of blocks	4	8	2/3/4 x 8
Duration of usage (according to EUROBAT)	> 12 years	> 12 years	> 12 years
Mechanical Data			
SBU (width / height / depth in mm)	467 / 612 / 235	467 / 612 / 235	467 / 612 / 235
AS-Box (width / height / depth in mm)	600 / 600 / 210	600 / 760 / 210	1000 / 1600 / 300
Batteries per block (width / height / depth in mm)	498 / 230 / 177	498 / 230 / 177	498 / 230 / 177
Weight per (SBU / AS-Box / battery block)	63 kg / 35 kg / 54.5 kg	63 kg / 45 kg / 54.5 kg	63 kg / 130 kg / 54.5 kg
Ambient Conditions			
Ambient temperature (SBU, AS-Box)	-25 °C ... +50 °C	-25 °C ... +50 °C	-25 °C ... +50 °C
Enclosure type, DIN EN 60529 (SBU, AS-Box)	IP30 / IP65	IP30 / IP65	IP30 / IP65
Accessories			
Cables (Battery connection up to 3 m / communication)	included	included	included
Generator connection	optional (8 kW)	optional (30 kW)	optional (110 kW)

Basic principle of a PV-system with the Sunny Backup

