

SMA Sunny Island – Maximum own consumption

Storage system

Due to the Sunny Island system, solar energy will always be available when needed – even after sun-down or if the sun is hidden behind a cloud cover. By means of its battery management, the system automatically charges and discharges the connected battery. Only if the battery is fully charged and no household consumer needs power will the PV inverter feed generated power into the public grid.

SMA Smart Home

Intelligent household energy management is very easy with SMA Smart Home: It combines PV system, consumers and solar store and completely automatically controls all energy flows. Its central component is the Sunny Home Manager. It bundles all generation and consumption data, analyses them and clearly displays the most important values.

Hoppecke batteries

Due to their high charge and discharge load, Hoppecke's sealed lead-gel batteries are optimally suitable for solar power storage. Thanks to the gel technology, OPzV tubular plate batteries have a cycle life of about 2500 cycles with a 50 % depth of discharge.

Advantages in brief

- Power supply through own solar energy
- High degree of independence from the public grid will be possible
- Intelligent load and energy management for higher own consumption rates and more independence
- Suitable for retrofitting of existing systems or for new systems
- Feeding excess electric power into the public grid
- Maintenance-free batteries



The Sunny Island system is characterised by a particularly high degree of efficiency.



Generated solar energy is efficiently buffer-stored in extremely deep cycle Hoppecke batteries.

STORAGE SYSTEMS AC System

Art. No. 0600373






Model	Sunny Island 6.0H
AC nominal power	4600 W
AC output 25 °C (30 min / 5 min / 3 s)	6000 W / 6800 W / 11000 W
Number of phases	1
Output voltage	Sine wave
Line voltage	230 V (202 V – 253 V)
Frequency	50 Hz (45 Hz – 65 Hz)
AC output current	20 A
Max. AC output current (peak)	120 A
Harmonic distortion (output voltage)	< 4 %
Power factor at nominal power	-1 to +1
AC input voltage	230 V (172.5 V – 264.5 V)
Input frequency	50 Hz (40 Hz – 70 Hz)
Max. AC input current	50 A
Max. AC input power	11500 W
DC input voltage batteries	48 V (41 V – 63 V)
Max. battery charging current	110 A
Nominal DC charging current battery	100 A
Battery type	FLA, VRLA
Battery capacity	100 Ah – 10000 Ah
Charge control	IUoU charging process with automatic full and equalising charge
Max. efficiency	95 %
Power consumption (without load / standby)	< 26 W / < 4 W
AC short circuiting / AC overload	Yes / Yes
DC reverse polarity protection / DC fuse	No / No
Excess temperature / Exhaustive battery discharge	Yes / Yes
Overvoltage category	III
Capable of emergency power	Yes
Operating temperature	-25 to +60 °C
Protection mode	IP54
Multi-function relay	2
Paraller connection	Yes
Battery temperature sensor	Yes
Data communication	Yes
Display	Externally via SRC-20
Dimensions (W / H / D)	467 mm / 612 mm / 242 mm
Weight	63 kg
Warranty*	5 years
Norms	EN 61000-6-1:2007, EN 61000-6-2:2005, EN 61000-6-3:2007, EN 61000-6-4:2007, EN 61000-3-12:2005, EN 55022:2006 + A1:2007, EN 50178:1997, EN 62109-1:2010, protection class I, climatic category 3K6

* - Can optionally be extended to 10 / 15 / 20 / 25 years

Continued on next page



Hoppecke batteries

Art. No.	0303083	0303084	0303085
			
Model	Hoppecke sun.power pack 4.9 kWh – SMA SI 6.0H	Hoppecke sun.power pack 7.4 kWh – SMA SI 6.0H	Hoppecke sun.power pack 9.8 kWh – SMA SI 6.0H
Storage capacity of batteries	4.9 kWh	7.4 kWh	9.8 kWh
System voltage	48 V	48 V	48 V
Battery capacity (C10)	103 Ah	154 Ah	205 Ah
Battery	12 V 2 OPzV sun.power 120	12 V 2 OPzV sun.power 180	6 V 2 OPzV sun.power 250
Number of batteries	4 pc.	4 pc.	8 pc.
Number of cycles (at 20 °C, 50 % DoD)	2500 (approx.)	2500 (approx.)	2500 (approx.)
Included in delivery	4 x 12 V 2 OPzV sun.power 120, installation rack, battery connection lines, Hoppecke battery fuse in ISO housing and fuse links	4 x 12 V 2 OPzV sun.power 180, installation rack, battery connection lines, Hoppecke battery fuse in ISO housing and fuse links	8 x 6 V 2 OPzV sun.power 250, 2 x installation rack with 4 batteries each, battery connection lines, Hoppecke battery fuse in ISO housing and fuse links
Dimensions (W / H / D)	890 mm / 870 mm / 260 mm	890 mm / 870 mm / 260 mm	2 x 660 mm / 870 mm / 260 mm
Weight	275 kg	370 kg	495 kg
Warranty	2 years	2 years	2 years

Accessories

Art. No.	Model	Description	Belongs to Art. No.
0201590	SMA Sunny Home Manager	Energy management incl. monitoring	0600373
0600375	SMA SRC20 Remote Control	Remote control	0600373
0600378	SMA SI Speedwire data module	Speedwire data module	0600373

