

# SUNNY ISLAND 6.0H / 8.0H FOR OFF-GRID APPLICATIONS



SI6.0H-11 / SI8.0H-11



## Easy to use

- OptiUse: fast installation and commissioning, simplified operation
- OptiBat: state of charge calculation keeps you informed at all times

## Robust

- IP 54: optimal protection from dust and humidity
- OptiCool: greater temperature range
- OptiPower: secure operation in any situation

## Flexible

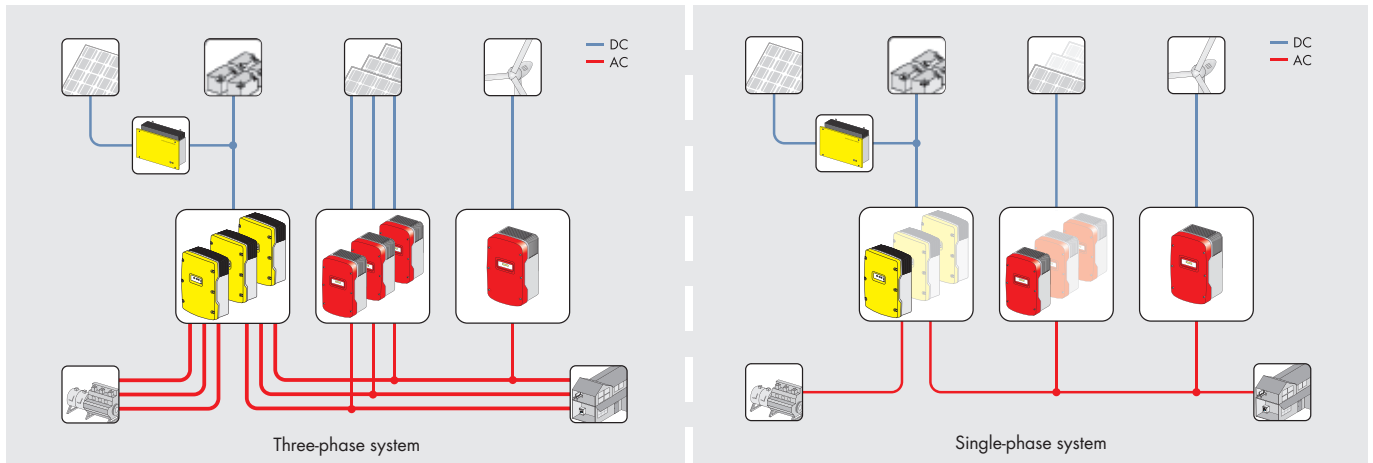
- For systems from 3 to 300 kW
- Precise design
- Supports Multicluster Technology

## SUNNY ISLAND 6.0H / 8.0H

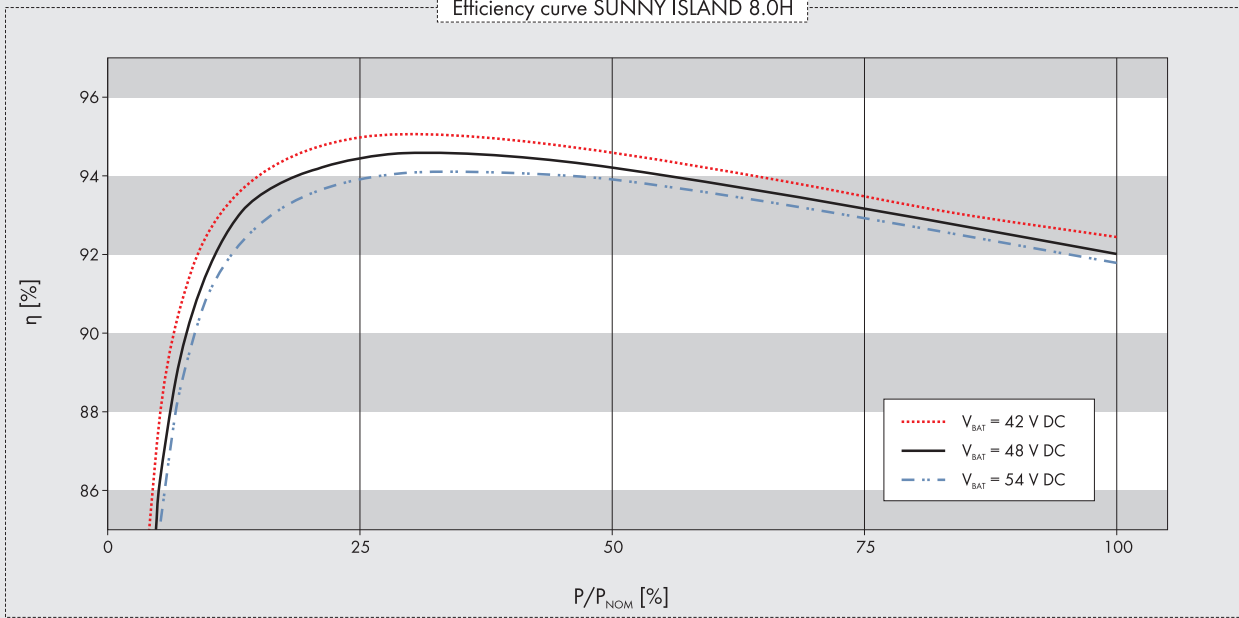
Simple. Robust. Flexible.

More durable than its predecessors: The new Sunny Island impresses with its high protection class and wide temperature range. Moisture, dust and temperature fluctuations won't impair its operation, even after 20 years. Thanks to OptiCool, there's no need to compromise when it comes to overload capacity and economic viability. And there's more: OptiPower, the intelligent load and energy management system, ensures operation even in critical situations. OptiUse makes installation, commissioning and daily use easier than ever with automatic rotary field detection, an optimized quick configuration guide and intuitive operation. And the intelligent OptiBat battery management system automatically controls the most important charging and discharging procedures, which extends the service life of sensitive energy storage. Sunny Island is a truly comprehensive package for a worry-free, reliable and self-sufficient electricity supply.

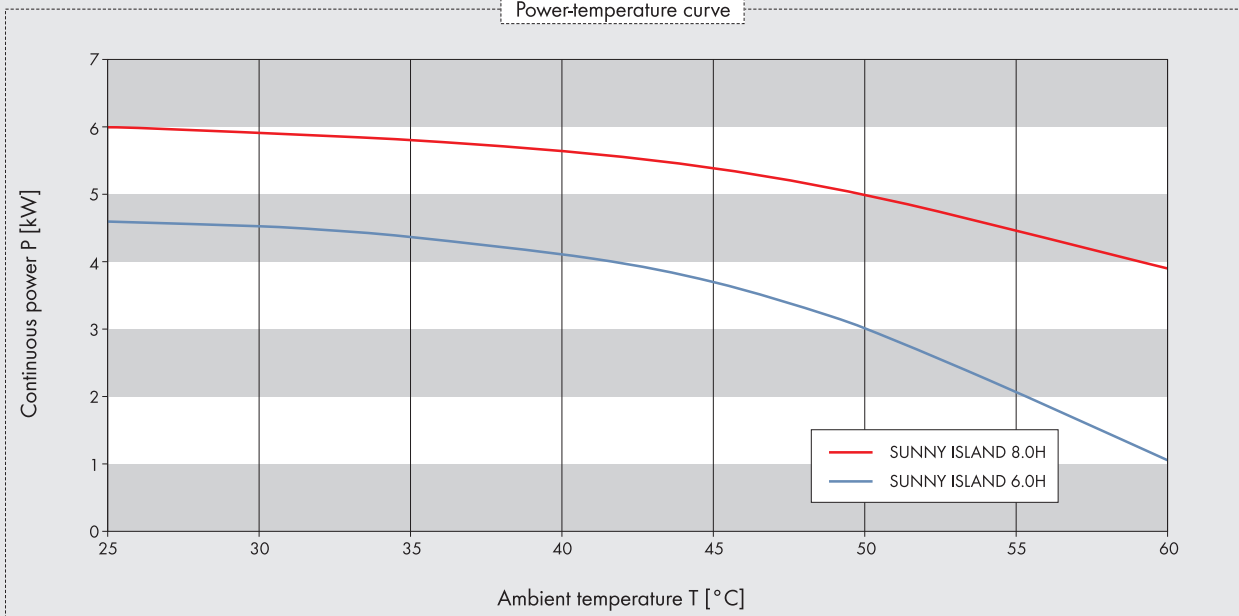
# SUNNY ISLAND 6.0H / 8.0H



Efficiency curve SUNNY ISLAND 8.0H



Power-temperature curve



Technical data	Sunny Island 6.0H	Sunny Island 8.0H
<b>AC output (loads / stand-alone grid)</b>		
Rated grid voltage / AC voltage range	230 V / 202 V ... 253 V	230 V / 202 V ... 253 V
Rated frequency / frequency range (adjustable)	50 Hz / 45 Hz ... 65 Hz	50 Hz / 45 Hz ... 65 Hz
Rated power (for Unom / fnom / 25 °C / cos φ = 1)	4600 W	6 000 W
AC power at 25 °C for 30 min / 5 min / 3 sec	6 000 W / 6 800 W / 11 000 W	8 000 W / 9 100 W / 11 000 W
AC power at 45 °C	3 700 W	5 430 W
Rated current / maximum output current (peak)	20 A / 120 A	26 A / 120 A
THD output voltage / power factor with rated power	< 4 % / -1 ... +1	< 4 % / -1 ... +1
<b>AC input (PV array, grid or MC box)</b>		
Rated input voltage / AC input voltage range	230 V / 172.5 V ... 264.5 V	230 V / 172.5 V ... 264.5 V
Rated input frequency / allowable input frequency range	50 Hz / 40 Hz ... 70 Hz	50 Hz / 40 Hz ... 70 Hz
Maximum AC input current	50 A	50 A
Maximum AC input power	11 500 W	11 500 W
<b>Battery DC input</b>		
Rated input voltage / DC voltage range	48 V / 41 V ... 63 V	48 V / 41 V ... 63 V
Maximum battery charging current	110 A	140 A
Rated DC charging current / DC discharging current	90 A / 103 A	115 A / 136 A
Battery type / battery capacity (range)	FLA, VRLA / 100 Ah ... 10 000 Ah	FLA, VRLA / 100 Ah ... 10 000 Ah
Charge control	IUoU charge procedure with automatic full charge and equalization charge.	IUoU charge procedure with automatic full charge and equalization charge.
<b>Efficiency / self-consumption</b>		
Maximum efficiency	96 %	96 %
Self-consumption without load / standby	< 26 W / < 4 W	< 26 W / < 4 W
<b>Protective devices (equipment)</b>		
AC short-circuit / AC overload	● / ●	● / ●
DC reverse polarity protection / DC fuse	- / -	- / -
Overtemperature / battery deep discharge	● / ●	● / ●
Overvoltage category as per IEC 60664-1	III	III
<b>General data</b>		
Dimensions (width x height x depth)	467 mm x 612 mm x 242 mm	467 mm x 612 mm x 242 mm
Priority	63 kg	63 kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C
Protection class according to IEC 62103	I	I
Climatic category according to IEC 60721	3K6	3K6
Degree of protection according to IEC 60529	IP54	IP54
<b>Features / function</b>		
Operation and display / multifunction relay	External via SRC-20 / 2	External via SRC-20 / 2
Three-phase systems / parallel connection	● / ●	● / ●
Integrated bypass / multicluster operation	- / ●	- / ●
State of charge calculation / full charge / equalization charge	● / ● / ●	● / ● / ●
Integrated soft start / generator support	● / ●	● / ●
Battery temperature sensor / data cables	● / ●	● / ●
Certificates and approvals	www.SMA-Solar.com	www.SMA-Solar.com
Warranty: 5 years	●	●
<b>Accessory</b>		
Battery cable / battery fuse	○ / ○	○ / ○
Interface SI-COMSMA (RS485) / SI-SYSCAN (Multicluster)	○ / ○	○ / ○
Extended generator start "GenMan"	○	○
Load-shedding contactor / battery current measurement	○ / ○	○ / ○
Type designation	SI6.0H-11	SI8.0H-11
● Standard features ○ Optional features – Not available		
Data at nominal conditions		

# SMA OFF-GRID CONFIGURATOR

Design and simulation program for off-grid systems

