



## Flexible

- For systems from 1 to 9 kW
- 1- and 3-phase operation, connectable in parallel and modularly extendable
- AC and DC coupling

## Simple

- Simple installation
- Complete off-grid management
- Easy and remote configuration and monitoring with Sunny Remote Control

## Efficient

- High efficiency
- Reliable state-of-charge calculation
- Intelligent battery management for maximum battery life-span

## Durable

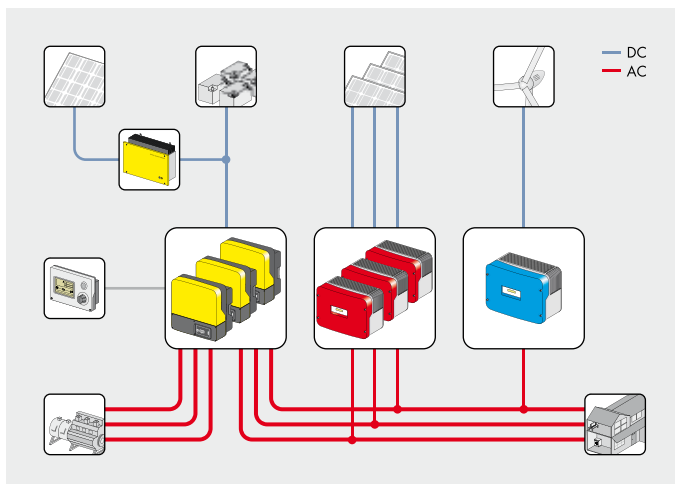
- For indoor and outdoor installation
- Excellent overload characteristics
- Very wide temperature range
- 5-year SMA Warranty

## SUNNY ISLAND 2012 / 2224

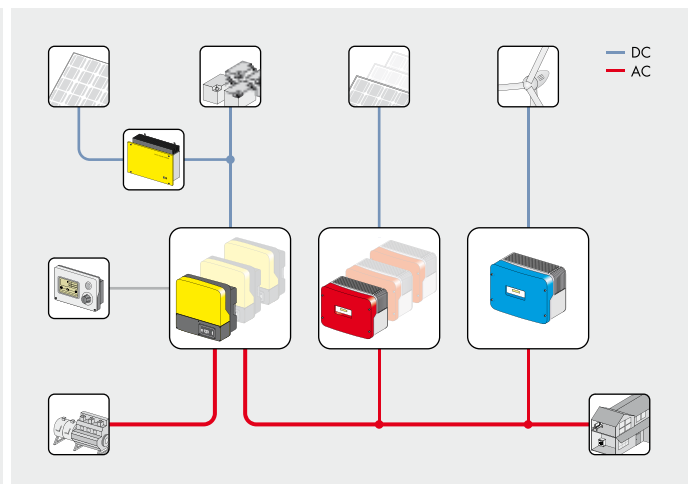
Compact and powerful for small stand-alone systems

New Sunny Island products: the Sunny Island 2012 and 2224 extend the product range for the lower power range. The devices not only feature all the proven product characteristics of the "big brother" Sunny Island 5048 – thanks to their reduced weight and compact design, the new family members are even easier to handle and install. The high IP54 protection class and the Sunny Remote Control (SRC-1) give you full flexibility when choosing an installation location. Easy-to-use technology at its best: the unbeatable combination for off-grid systems of up to 9 kilowatts.

Technical data	Sunny Island 2012	Sunny Island 2224
<b>AC output (loads)</b>		
Nominal AC voltage (adjustable)	230 V (202 V - 253 V)	230 V (202 V - 253 V)
Nominal frequency (adjustable)	50 Hz / 60 Hz (45 Hz - 65 Hz)	50 Hz / 60 Hz (45 Hz - 65 Hz)
Continuous AC power at 25 °C / 45 °C	2000 W / 1400 W	2200 W / 1600 W
AC output power at 25 °C for 30 min / 1 min / 3 s	2500 W / 3800 W / 3900 W	2900 W / 3800 W / 3900 W
Nominal AC current / max. AC current (peak)	8.7 A / 25 A for ca. 500 ms	9.6 A / 25 A for ca. 500 ms
THD output voltage / power factor (cos φ)	< 4 % / -1 to +1	< 4 % / -1 to +1
<b>AC input (generator or grid)</b>		
AC input voltage (range)	230 V (172.5 V - 264.5 V)	230 V (172.5 V - 264.5 V)
AC input frequency (range)	50 Hz / 60 Hz (40 Hz - 70 Hz)	50 Hz / 60 Hz (40 Hz - 70 Hz)
Max. input current (adjustable) / max. input power	25 A (0 A - 25 A) / 5.75 kW	25 A (0 A - 25 A) / 5.75 kW
<b>Battery DC input</b>		
Battery voltage (range)	12 V (8.4 V - 15.6 V)	24 V (16.8 V - 31.5 V)
Max. battery charging current / continuous charging current at 25 °C	180 A / 160 A	90 A / 80 A
Battery type / battery capacity (range)	lead, NiCd / 100 - 10,000 Ah	lead, NiCd / 100 - 10,000 Ah
Charge control	IUoU process	IUoU process
<b>Efficiency / operating consumption</b>		
Max. efficiency	93 %	93.6 %
Own consumption with no load / standby	21 W / 6 W	21 W / 6 W
<b>Protection devices</b>		
DC reverse polarity protection / DC fuse	-/-	-/-
AC short-circuit / AC overload	●/●	●/●
Overtemperature / excessive battery discharge	●/●	●/●
<b>General data</b>		
Dimensions (W / H / D) in mm	470 / 445 / 185	470 / 445 / 185
Weight	19 kg	19 kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C
Protection rating (according to IEC 60529)	outdoor installation (IP54)	outdoor installation (IP54)
<b>Features / function</b>		
Operation & display / multifunction relays / search mode	external via SRC-1 / 2 / ●	external via SRC-1 / 2 / ●
3-phase systems / parallel connection	●/●	●/●
Integrated bypass / multicluster operation	●/-	●/-
State-of-charge calculation / full- / equalization charge	●/●/●	●/●/●
Integrated soft start / generator support	●/●	●/●
Battery temperature sensor / communication cables	●/●	●/●
Warranty (5 / 10 / 15 / 20 / 25 years)	●/○/○/○/○	●/○/○/○/○
Certificates and permits	www.SMA-Solar.com	www.SMA-Solar.com
<b>Accessories</b>		
Battery cables / battery fuses	○/○	○/○
Interfaces (RS485 / Multicluster PB)	○/-	○/-
"GenMan" extended generator start	○	○
Load-shedding contactor / battery current measurement	○/○	○/○
● Standard features   ○ Optional features   - not available		
Last revision: May 2010		
Type designation	SI 2012	SI 2224



Three-phase system



Single-phase system