

Flexible

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

Efficient

- > High efficiency
- > Charge level calculation
- > Intelligent battery management for maximum battery life-span

Robust

- > 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 off-grid systems

New Sunny Island products: the Sunny Island 2012 and 2224 extend the product spectrum for the lower power range. The devices not only feature all the proven product characteristics of the Sunny Island 5048, but 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 / 2224

	Sunny Island 2012	Sunny Island 2224
AC output (users)		
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 / 5 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
Output voltage harmonic distortion factor / phase shift (cos φ)	< 4% / -1 to +1	< 4% / -1 to +1
AC input (generator or grid)		
Input voltage (range)	230 V (172.5 V - 264.5 V)	230 V (172.5 V - 264.5 V)
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
Battery DC input		
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
Efficiency / Operating consumption		
Max. efficiency	93 %	93.6 %
Own consumption with no load / standby	21 W / 6 W	21 W / 6 W
Protection devices		
DC reverse polarity protection / DC fuse	-/-	-/-
AC short-circuit / AC overload	●/●	●/●
Overtemperature / excessive battery discharge	●/●	●/●
General Data		
Dimensions (Width / Height / Depth 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	Outdoor installation (IP54)	Outdoor installation (IP54)
Features / Function		
Operation & display / multifunction relays	External via SRC-1 / 2	External via SRC-1 / 2
3-phase systems / parallel connection	●/●	●/●
Integrated bypass / multicuster operation	●/-	●/-
Charge level calculation / Full- / Equalization charge	●/●/●	●/●/●
Integrated soft start / Generator support	●/●	●/●
Battery temperature sensor / Communication cables	●/●	●/●
Warranty (5 years / 10 years)	●/○	●/○
Certificates and permits	www.SMA.de	www.SMA.de
Accessories		
Battery cables / battery fuses	○/○	○/○
Interfaces (RS485 PB / Multicuster PB)	○/-	○/-
"GenMan" extended generator start	○	○
Load-shedding contactor / Battery current measurement	○/○	○/○
● Standard ○ Optional		
Last update: March 2009		
Type Designation	SI 2012	SI 2224

