

**Flexible**

- For systems from 1 kW 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
- Intelligent battery management for maximum battery life
- State of Charge calculation

Durable

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

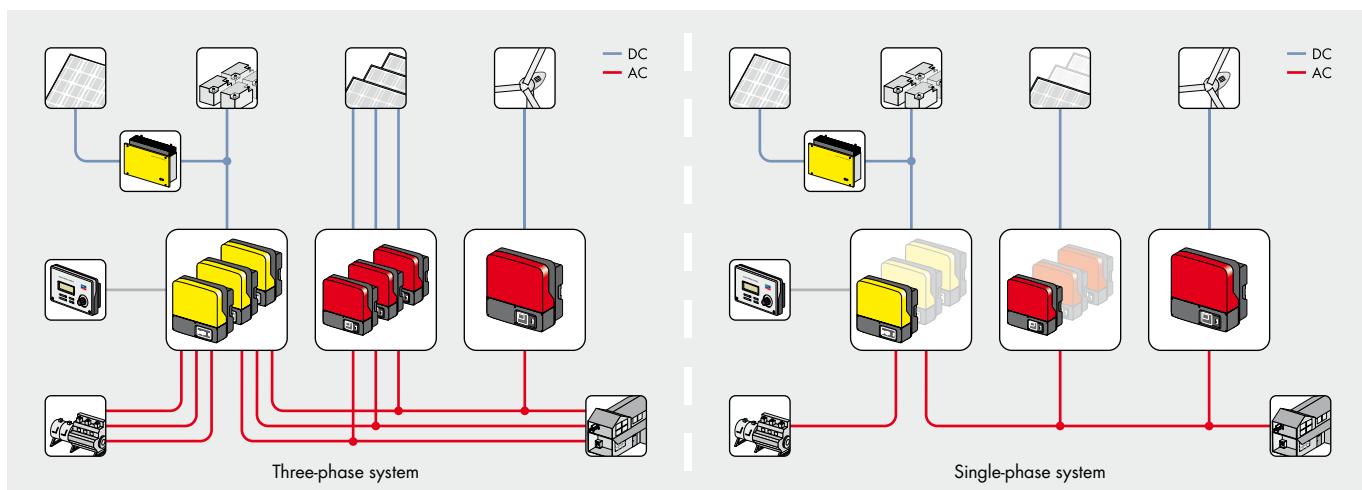
SUNNY ISLAND 2012 / 2224

Compact and powerful for small off-grid systems

Ideal for the lower power range in the SMA product portfolio: The Sunny Island 2012 and 2224 do not only cover all proven characteristics of the Sunny Island 5048. Reduced in weight and volume, the devices are even easier to operate and install. The high IP54 protection class and the Sunny Remote Control (SRC-20) service unit ensure maximum flexibility when choosing the site. Easy-to-use technology at the highest level: an unbeatable combination for off-grid systems up to 9 kW.

SUNNY ISLAND 2012 / 2224





Technical Data	Sunny Island 2012	Sunny Island 2224
AC output (loads)		
Nominal AC voltage / adjustable	230 V / 202 V - 253 V	230 V / 202 V - 253 V
Nominal AC frequency / adjustable	50 Hz, 60 Hz / 45 Hz ... 65 Hz	50 Hz, 60 Hz / 45 Hz ... 65 Hz
Continuous AC power (at 25 °C / at 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 approx. 500 ms	9.6 A / 25 A for approx. 500 ms
Total harmonic distortion output voltage / power factor at rated power	4 % / -1 ... +1	4 % / -1 ... +1
AC input (PV array or grid)		
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. AC input current / adjustable	25 A / 0 A ... 25 A	25 A / 0 A ... 25 A
Max. input power	5.75 kW	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	Lead, NiCd / 100 Ah ... 10000 Ah	Lead, NiCd / 100 Ah ... 10000 Ah
Charge control	IUoU process	IUoU process
Efficiency / self-consumption		
Max. efficiency	93 %	93.6 %
Self-consumption with no load / standby	21 W / 6 W	21 W / 6 W
Protective devices		
DC reverse polarity protection / DC fuse	-/-	-/-
AC short circuit / AC overload	●/●	●/●
Overtemperature / excessive battery discharge	●/●	●/●
General data		
Dimensions (W / H / D)	470 / 445 / 185 mm	470 / 445 / 185 mm
Weight	19 kg	19 kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C
Degree of protection (as per IEC 60529)	Outdoor installation (IP54)	Outdoor installation (IP54)
Features / function		
Operation & display / multifunction relay	External via SRC-20 / 2	External via SRC-20 / 2
3-phase systems / parallel connection	●/●	●/●
Integrated bypass / multicluster operation	●/-	●/-
State of Charge calculation / Full charge / Equalization charge	●/●/●	●/●/●
Integrated soft start / PV array support	●/●	●/●
Battery temperature sensor / communication cables	●/●	●/●
Warranty (5 / 10 / 15 / 20 / 25 years)	●/○/○/○/○	●/○/○/○/○
Certificates and approvals	www.SMA-Solar.com	www.SMA-Solar.com
Accessories		
Battery cable / battery fuse	○/○	○/○
Interface (RS 485 / Multicluster PB)	○/-	○/-
"GenMan" extended PV array start	○	○
Load-shedding protection / battery current measurement	○/○	○/○
● Standard features ○ Optional features – not available		
Type designation	SI 2012	SI 2224

SMA OFF-GRID CONFIGURATOR

Design and Simulation Program for Off-Grid Systems

