



Flexible

- For systems from 3 to 300 kW
- 1- and 3-phase operation, connectable in parallel and modularly extendable
- AC and DC coupling

Simple

- Easy commissioning with the "Quick Configuration Guide"
- Complete off-grid management

Efficient

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

Robust

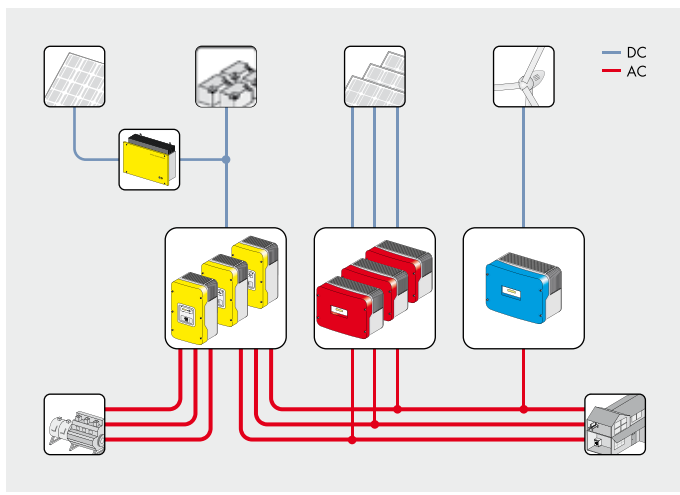
- Extreme overload capability
- OptiCool
- 5-year SMA warranty

SUNNY ISLAND 5048 / 5048-US

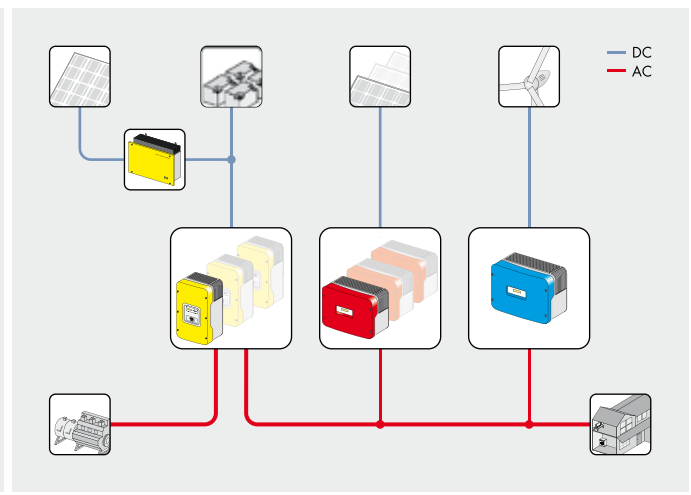
The Island Manager

Commissioning within minutes: the Sunny Island 5048 makes it possible. All required operational settings can be made quickly and easily in just a few steps. The Sunny Island 5048 is flexible in its application, extendable and takes on all control processes. Its first-class battery management ensures maximum battery lifetime. In addition, the device features an impressive high-efficiency, ergonomic die-cast aluminum enclosure and an OptiCool active cooling system. The Sunny Island is also available in a UL-compliant 5048-US version with an output rating of 120 V and 60 Hz for the North American market.

Technical data	Sunny Island 5048	Sunny Island 5048-US
AC output (loads)		
Nominal AC voltage (adjustable)	230 V (202 V - 253 V)	120 V (105 V - 132 V)
Nominal frequency (adjustable)	50 Hz / 60 Hz (45 Hz - 65 Hz)	60 Hz (55 Hz - 65 Hz)
Continuous AC power at 25 °C / 45 °C	5000 W / 4000 W	5000 W / 4000 W
AC output power at 25 °C for 30 min / 1 min / 3 s	6500 W / 8400 W / 12000 W	6500 W / 8400 W / 11000 W
Nominal AC current / max. AC current (peak)	21.7 A / 120 A for 60 ms	41.7 A / 180 A for 60 ms
THD output voltage / power factor (cos φ)	< 3 % / -1 to +1	< 3 % / -1 to +1
AC input (generator or grid)		
AC input voltage (range)	230 V (172.5 V - 264.5 V)	120 V (80 V - 150 V)
AC input frequency (range)	50 Hz / 60 Hz (40 Hz - 70 Hz)	60 Hz (54 Hz - 66 Hz)
Max. input current (adjustable) / max. input power	56 A (0 A - 56 A) / 12.8 kW	56 A (0 A - 56 A) / 6.7 kW
Battery DC input		
Battery voltage (range)	48 V (41 V - 63 V)	48 V (41 V - 63 V)
Max. battery charging current / continuous charging current at 25 °C	120 A / 100 A	120 A / 100 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	95 %	95 %
Own consumption with no load / standby	25 W / 4 W	25 W / 4 W
Protection devices		
DC reverse polarity protection / DC fuse	●/●	●/●
AC short-circuit / AC overload	●/●	●/●
Overtemperature / excessive battery discharge	●/●	●/●
General data		
Dimensions (W / H / D) in mm	467 / 612 / 235	467 / 612 / 235
Weight	63 kg	63 kg
Operating temperature range	-25 °C ... +50 °C	-25 °C ... +50 °C
Protection rating (as per IEC 60529)	indoors (IP30)	indoors (NEMA 1)
Features / function		
Operation & display / multifunction relays	internal / 2	internal / 2
3-phase systems / parallel connection	●/●	●/●
Integrated bypass / multicuster 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
Accessories		
Battery cables / battery fuses	○/○	○/○
Interfaces (RS485 / Multicuster PB)	○/○	○/○
"GenMan" extended generator start	○	○
Load-shedding contactor / battery current measurement	○/○	○/○
● Standard features ○ Optional features - Not available		
Last revision: May 2010		
Type designation	SI 5048	SI 5048U



Three-phase system



Single-phase system