



SUNNY ISLAND 5048-US

SI 5048U



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
- Charge level calculation

Robust

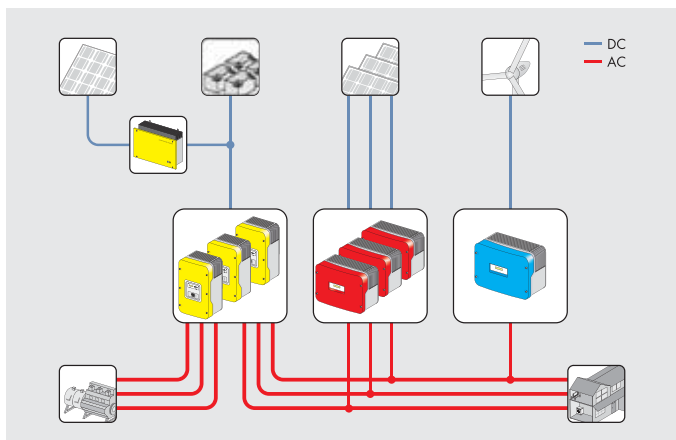
- Extreme overload capability
- OptiCool™ active temperature management system
- 5-year warranty

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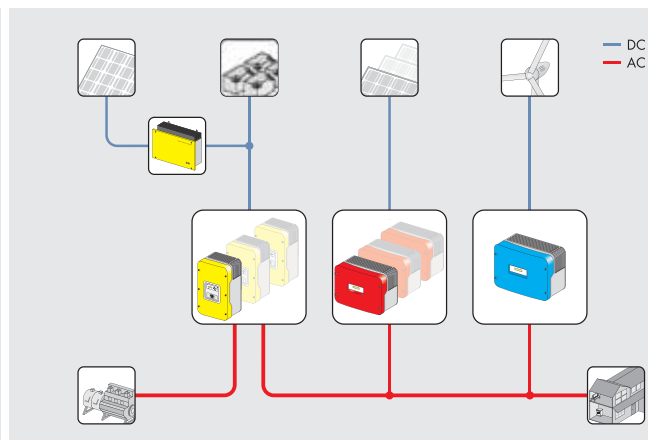
The Island Manager

The UL-compliant Sunny Island 5048-US makes commissioning within minutes possible. All required operational settings can be made quickly and easily in just a few steps. The Sunny Island 5048 is versatile, extendable and takes on all control processes. Its first-class battery management ensures maximum battery life. It also features impressive efficiency, a rugged die-cast aluminum enclosure and the OptiCool active cooling system. With an output rating of 120 V and 60 Hz, the Sunny Island 5048-US is perfect for the North American market.

Technical data	Sunny Island 5048-US
AC output (loads)	
Nominal AC voltage (adjustable)	120 V (105 V - 132 V)
Nominal frequency (adjustable)	60 Hz (55 Hz - 65 Hz)
Continuous AC power at 25 °C / 45 °C (77 °F / 113 °F)	5000 W / 4000 W
AC output power at 25 °C (77 °F) for 30 min / 1 min / 3 s	6500 W / 8400 W / 11000 W
Nominal AC current / max. AC current (peak)	41.7 A / 180 A for 60 ms
THD output voltage / power factor (cos φ)	< 3% / -1 to +1
AC input (generator or grid)	
AC input voltage (range)	120 V (80 V - 150 V)
AC input frequency (range)	60 Hz (54 Hz - 66 Hz)
Max. input current (adjustable) / max. input power	56 A (0 A - 56 A) / 6.7 kW
Battery DC input	
Battery voltage (range)	48 V (41 V - 63 V)
Max. battery charging current / continuous charging current at 25 °C (77 °F)	120 A / 100 A
Battery type / battery capacity (range)	lead, NiCd / 100 - 10000 Ah
Charge control	IUoU process
Efficiency / operating consumption	
Max. efficiency	95%
Internal consumption with no load / standby	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 (in)	467 / 612 / 235 (18 / 24 / 9)
Weight	63 kg (139 lb)
Operating temperature range	-25 °C ... +50 °C (-13 °F ... +122 °F)
Protection rating (as per IEC 60529)	indoors (NEMA 1)
Features / function	
Operation & display / multifunction relays	internal / 2
3-phase systems / parallel connection	●/●
Integrated bypass / multicluster operation	-/●
Charge level 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
Accessories	
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 5048U



Three-phase system



Single-phase system

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