

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

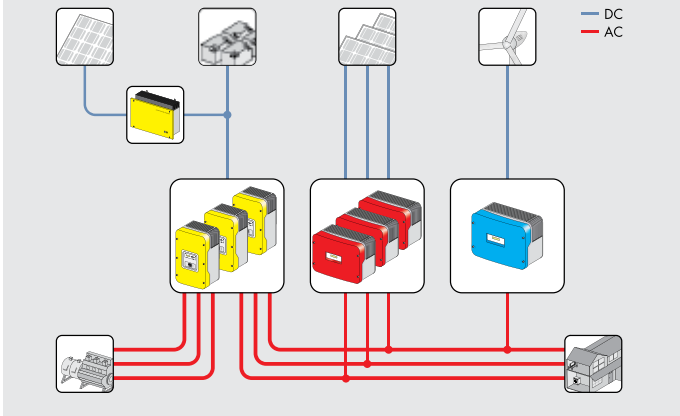
- Extreme overload capability
- OptiCool™ active temperature management system
- 5-year warranty

SUNNY ISLAND 5048-US

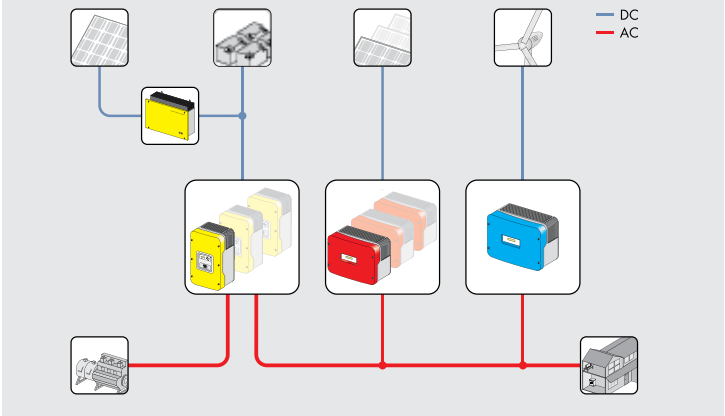
The Island Manager

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-US 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 years	●/o/o/o
Certificates and permits	www.SMA-Solar.com
Accessories	
Battery cables / battery fuses	o/o
Interfaces (RS485 / Multicluster PB)	o/o
"GenMan" extended generator start	o
Load-shedding contactor / battery current measurement	o/o
● Standard features o Optional features – Not available	
Last revision: May 2010	
Type designation	SI 5048U



Three-phase system



Single-phase system

SUNNYISS048USDUS122617 Sunny Island, OptiCool, and SMA are registered trademarks of SMA Solar Technology AG. Text and figures comply with the state of the art applicable when printing. Subject to technical changes. We accept no liability for typographical and other errors. Printed on chlorine-free paper.

Toll Free +1 888 4 SMA USA
www.SMA-America.com

SMA America, LLC