



Flexible

- For systems from 3 kW 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
- State of charge calculation

Durable

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

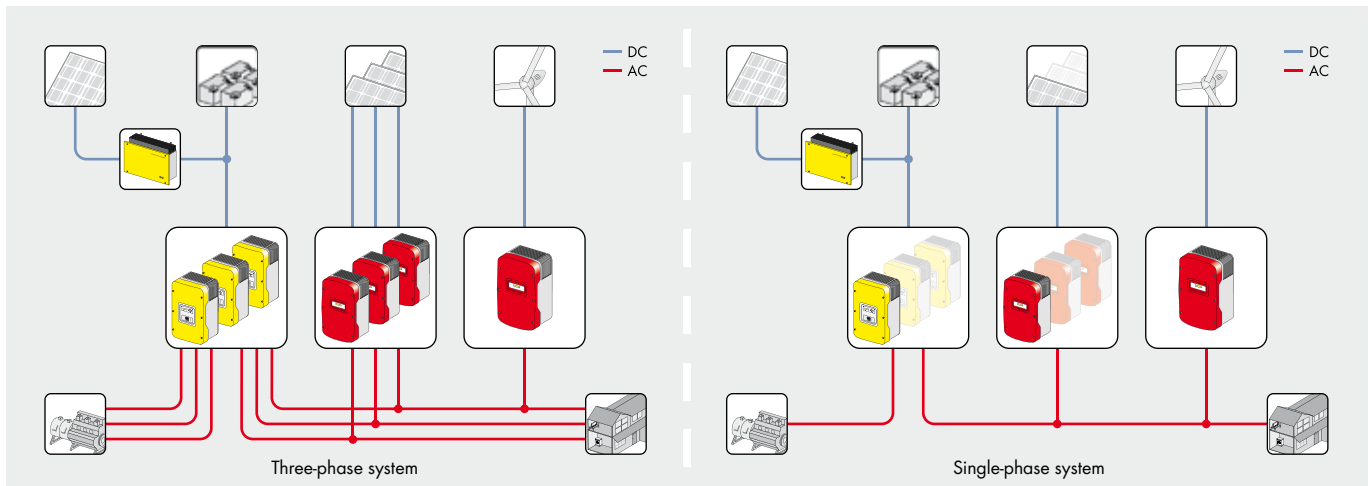
SUNNY ISLAND 5048

The Island Manager

Commissioning in just a few minutes: The Sunny Island 5048 can be quickly and simply prepared for operation in just a few steps. The device is flexible in its application, extendable and takes on all control processes. Its first-class battery management ensures maximum battery life. In addition, the device features an impressively high efficiency, a robust die-cast aluminum enclosure and the OptiCool active cooling system.

SUNNY ISLAND 5048





Technical Data	Sunny Island 5048	
AC output (loads)		
Nominal AC voltage / adjustable	230 V / 202 V – 253 V	
Nominal AC frequency / adjustable	50 Hz, 60 Hz / 45 Hz ... 65 Hz	
Continuous AC power (at 25 °C / at 45 °C)	5000 W / 4000 W	
AC power at 25 °C for 30 min / 1 min / 3 s	6500 W / 8400 W / 12000 W	
Nominal AC current / Max. AC current (peak)	21.7 A / 120 A for approx. 60 ms	
Total harmonic distortion output voltage / power factor with rated power	3 % / -1 ... +1	
AC input (PV array or grid)		
AC input voltage / range	230 V / 172.5 V – 264.5 V	
AC input frequency / range	50 Hz, 60 Hz / 40 Hz ... 70 Hz	
Max. input current / adjustable	56 A / 0 A ... 56 A	
Max. input power	12.8 kW	
Battery DC input		
Battery voltage / range	48 V / 41 V – 63 V	
Max. battery charging current / continuous charging current at 25 °C	120 A / 100 A	
Battery type / battery capacity	Lead, NiCd / 100 Ah ... 10000 Ah	
Charge control	IUoU process	
Efficiency / self-consumption		
Max. efficiency	95 %	
Self-consumption with no load / standby	25 W / 4 W	
Protection		
DC reverse polarity protection / DC fuse	●/●	
AC short circuit / AC overload	●/●	
Overtemperature / excessive battery discharge	●/●	
General data		
Dimensions (W / H / D)	467 / 612 / 235 mm	
Weight	63 kg	
Operating temperature range	-25 °C ... +50 °C	
Degree of protection (as per IEC 60529)	Indoor installation (IP30)	
Features / function		
Operation & display / multifunction relay	internal / 2	
3-phase systems / parallel connection	●/●	
Integrated bypass / multicluster operation	-/●	
Charge level calculation / full charge / equalization charge	●/●/●	
Integrated soft start / PV array support	●/●	
Battery temperature sensor / communication cables	●/●	
Warranty (5 years)	●	
Certificates and approvals	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 5048	

SMA OFF-GRID CONFIGURATOR

Design and Simulation Program for Off-Grid Systems

