SUNNY ISLAND 5048





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
- Charge level calculation

Durable

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

SUNNY ISLAND 5048

The Island Manager

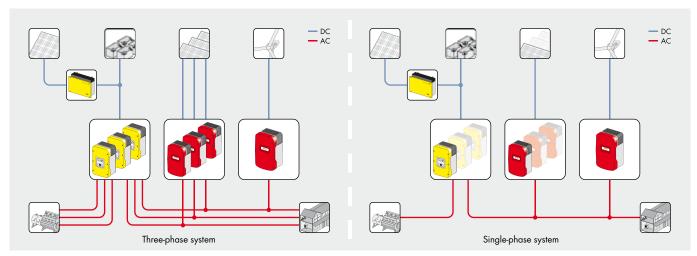
Commissioning in just a few minutes: The Sunny Island 5048 can be quickly and simply prepared for operation in just a few steps. The device is flexible in its application, extendable and takes on all control processes. Its first-class battery management ensures maximum battery life. In addition, the 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
otal 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
Λax. input power	12.8 kW
Sattery 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
fficiency/self-consumption	·
Λαx. efficiency	95%
Self-consumption with no load/standby	25 W/4 W
rotection	
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
Veight	63 kg
Operating temperature range	-25 °C +60 °C
Degree of protection (as per IEC 60529)	Indoor installation (IP30)
Features/function	macer installation (if co)
Operation & display/multifunction relay	internal/2
8-phase systems/parallel connection	●/●
ntegrated bypass/multicluster operation	-/•
Charge level calculation/full charge/equalization charge	-/ - •/•/•
ntegrated soft start/PV array support	•/•
Battery temperature sensor/communication cables	•/•
Varranty (5/10/15/20/25 years)	•/o/o/o
Varranty (5/10/15/20/25 years) Certificates and approvals	●/0/0/0/0 www.SMA-Solar.com
cernincaies and approvais	www.JMA-JOIGI.COIII
	0/0
Sattery cable/battery fuse	0/0
nterface (RS 485/Multicluster PB)	0/0
GenMan" extended PV array start	0
oad-shedding protection/battery current measurement	0/0
Standard features O Optional features – not available	
Type designation	SI 5048

SMA OFF-GRID CONFIGURATOR

Design and Simulation Program for Off-Grid Systems

