

SUNNY ISLAND 4548-US / 6048-US

SI 4548-US-10 / 6048-US-10



Efficient

- Maximum efficiency: 96 %
- CEC efficiency: 94 % and 94.5 %
- State of Charge Calculation
- Intelligent battery management for longer battery lifespan

Simple

- Easy commissioning with the "Quick Configuration Guide"
- Complete off-grid management
- Excellent for grid-tied battery back up

Flexible

- For Sunny Island systems from 2 to 100 kW
- Single, 120/240 V split-phase and three-phase operation, connectable in parallel and modularly expandable

Durable

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

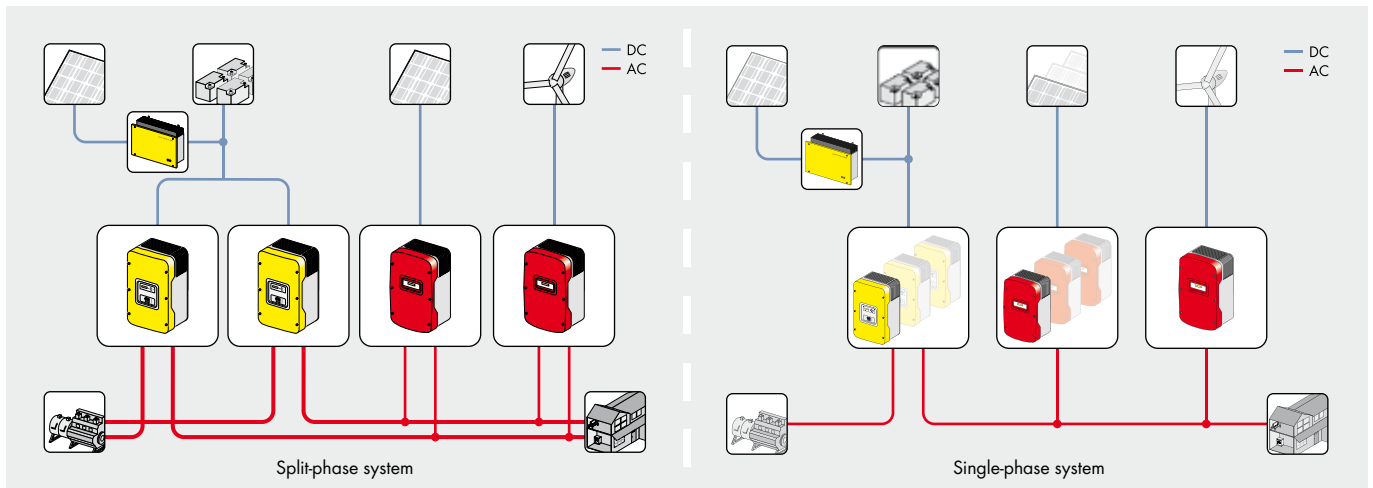
SUNNY ISLAND 4548-US / 6048-US

The efficient off-grid manager – now with 20 percent more power

The new SMA Sunny Island 4548-US and 6048-US inverters are based on the proven off-grid technology in the Sunny Island 5048-US but now feature 20 percent more power output. A maximum efficiency of 96 percent ensures peak production, which results in reduced diesel usage and makes a smaller dimensioning of the PV array possible. The new Sunny Island with two different power ratings enable more flexible system sizing. And, with multicuster technology, up to 12 Sunny Islands can be integrated into off-grid power systems up 100 kW in size.

SUNNY ISLAND 4548-US / 6048-US





Technical Data	Sunny Island 4548-US	Sunny Island 6048-US
AC output (loads)		
Nominal AC voltage / adjustable	120 V / 105 V - 132 V	120 V / 105 V - 132 V
Nominal AC frequency / adjustable	60 Hz / 55 Hz ... 65 Hz	60 Hz / 55 Hz ... 65 Hz
Continuous AC power at 25 °C / 40 °C (77 °F / 113 °F) for 3 h	5000 W / 4000 W	6000 W / 5000 W
Continuous AC power at 25 °C (77 °F)	4500 W	5750 W
AC power at 25 °C (77 °F) for 30 min / 1 min / 3 s	5300 W / 8400 W / 11000 W	7000 W / 8400 W / 11000 W
Nominal AC current / max. AC current (peak)	37.5 A / 180 A for approx. 60 ms	48 A / 180 A for approx. 60 ms
THD output voltage / power factor at rated power	3 % / -1 ... +1	3 % / -1 ... +1
AC input (generator or grid)		
AC input voltage / range	120 V / 80 V - 150 V	120 V / 80 V - 150 V
AC input frequency / range	60 Hz / 54 Hz ... 66 Hz	60 Hz / 54 Hz ... 66 Hz
Max. input current / adjustable	56 A / 0 A ... 56 A	56 A / 0 A ... 56 A
Max. input power	6.7 kW	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 (77 °F)	100 A / 85 A	130 A / 110 A
Battery type / battery capacity	Lead, NiCd / 100 Ah ... 10000 Ah	Lead, NiCd / 100 Ah ... 10000 Ah
Charge control	IUoU process	IUoU process
DC breaker rating / max.	2x125 A / 250 A	2x125 A / 250 A
Efficiency / self-consumption		
Max. efficiency / CEC efficiency	96 % / 94.5 %	96 % / 94 %
Self consumption with no load / standby	25 W / 4 W	25 W / 4 W
Protection		
DC reverse polarity protection / DC fuse	● / ●	● / ●
AC short circuit / AC overload	● / ●	● / ●
Overtemperature / battery deep discharge	● / ●	● / ●
General data		
Dimensions (W / H / D)	467 / 612 / 235 mm (18.4 / 24.1 / 9.3 inch)	467 / 612 / 235 mm (18.4 / 24.1 / 9.3 inch)
Weight	63 kg / 139 lb	63 kg / 139 lb
Operating temperature range	-25 °C ... +60 °C / -13 °F ... +122 °F	-25 °C ... +60 °C / -13 °F ... +122 °F
Degree of protection (according to IEC 60529)	Interior assembly (NEMA 1)	Interior assembly (NEMA 1)
Features / function		
Operation & display / multifunctional relay	Internal / 2	Internal / 2
3-phase systems / parallel connection	● / ●	● / ●
Integrated bypass / multicuster operation	- / ●	- / ●
State of charge calculation / full charge / equalization charge	● / ● / ●	● / ● / ●
Integrated soft start / generator support	● / ●	● / ●
Battery temperature sensor / communication lines	● / ●	● / ●
Warranty: 5 years	●	●
Certificates and approvals	www.SMA-Solar.com	www.SMA-Solar.com
Accessories		
Battery cable / battery fuse	○ / ○	○ / ○
Interface (RS485 / Multicuster PB)	○ / ○	○ / ○
Extended generator start "GenMan"	○	○
Load-shedding contactors / external battery current measurement	○ / ○	○ / ○
● Standard features ○ Optional - Not available		
Type designation	SI4548-US-10	SI6048-US-10

SMA OFF-GRID CONFIGURATOR

Design and Simulation Program for Off-Grid Systems

