

SUNNY ISLAND 4548-US / 6048-US

SI4548-US-10 / SI6048-US-10



Efficient

- Maximum efficiency > 96%
- CEC efficiency of 94.5%
- Charge level calculation
- Intelligent battery management for battery life

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 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, extendable to 20 years

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 in rural communities. More flexible sizing allows for simplified system planning. And, with multicuster technology, up to 12 Sunny Islands can be integrated into off-grid power systems up 100 kW in size.

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 / 45 °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 output 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	100 A / 85 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) in mm (in)	467 / 612 / 235 (18 / 24 / 9)	467 / 612 / 235 (18 / 24 / 9)
Weight	63 kg (139 lb)	63 kg (139 lb)
Operating temperature range	-25 °C ... +60 °C (-13 °F ... +140 °F)	-25 °C ... +60 °C (-13 °F ... +140 °F)
Degree of protection (according to IEC 60529)	internal assembly (NEMA 1)	internal assembly (NEMA 1)
Features / function		
Operation & display	internal / 2	internal / 2
3-phase systems / parallel connection / split-phase	●/●/●	●/●/●
Integrated bypass / multicluster operation	- / ●	- / ●
State of charge calculation / full charge / equalization charge	●/●/●	●/●/●
Integrated soft start / generator support	●/●	●/●
Battery temperature sensor / communication cables	●/●	●/●
Warranty: 5 / 10 / 15 / 20 years	●/○/○/○	●/○/○/○
Certificates and approvals	www.SMA-Solar.com	www.SMA-Solar.com
Accessories		
Battery cables / battery fuse	○/○	○/○
Interfaces (RS485 / Multicluster PB)	○/○	○/○
Extended generator start "GenMan"	○	○
Load-shedding contactors / external battery current measurement	○/○	○/○
● Standard features ○ Optional features - Not available		
Last revision: August 2011		
Type designation	SI4548-US-10	SI6048-US-10

