SUNNY ISLAND 3.0M / 4.4M
FOR ON-GRID AND OFF-GRID APPLICATIONS

SI3.0M-11 / SI4.4M-11

Flexible

- For self-consumption systems, battery backup systems and off-grid systems
- For single- and three-phase systems from 2 to 13 kW

- All lead-acid batteries and many lithium-ion batteries can be used

Efficient

- Maximum efficiency greater than 95 %
- High efficiency of overall system
- Easy commissioning and installation

Safe and reliable

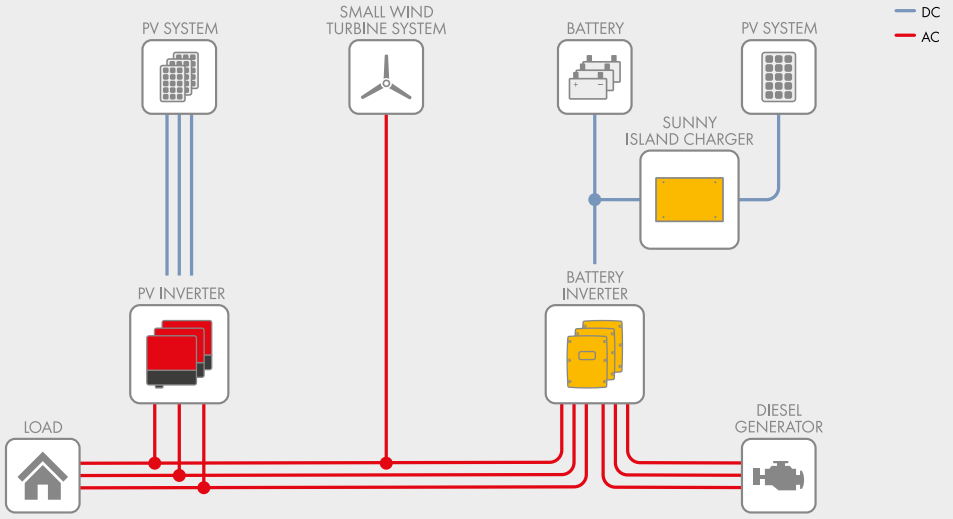
- Proven safety thanks to external certification
- Long battery life thanks to intelligent battery management
- Reliable operation thanks to high overload capacity

SUNNY ISLAND 3.0M / 4.4M

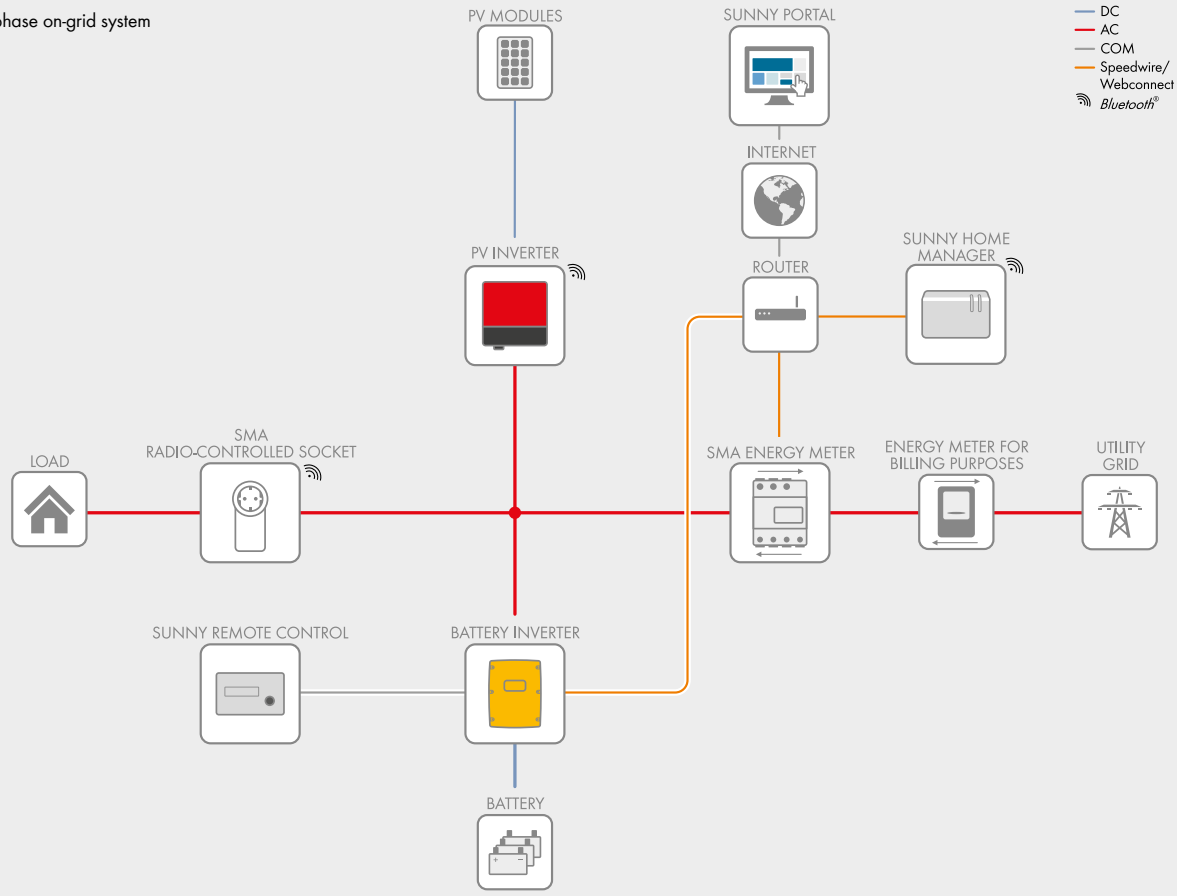
The custom-fit solution for on-grid and off-grid

The Sunny Island 3.0M and 4.4M support a wide range of on-grid and off-grid applications, and both systems have a number of compelling product features. Users benefit from SMA's over 25 years of experience with battery inverter technology. Its high protection class, wide temperature range and overload capacity provide the kind of reliability needed for off-grid use. Intelligent load and energy management keeps the system running even in critical situations. And being a core element in the SMA Flexible Storage System for new and existing PV systems, the Sunny Island system stores generated solar power and works with the Sunny Home Manager to intelligently manage home energy consumption. The quick configuration guide and intuitive user interface help ensure quick and convenient commissioning in any both cases. The new Sunny Island 3.0M and 4.4M systems are the perfect product solutions for stand-alone and grid-connected systems in a power output range of up to 13 kW.

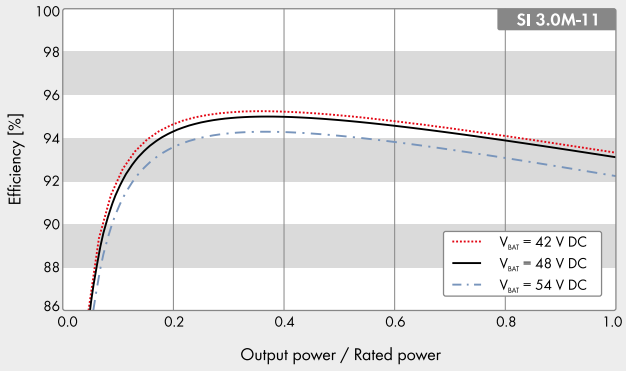
Three-phase off-grid system



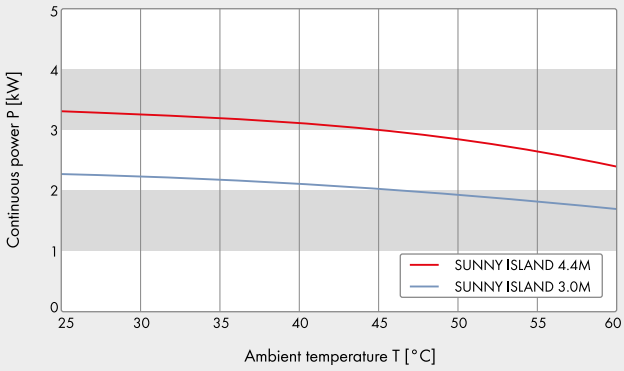
Single-phase on-grid system



Efficiency curve



Power-temperature curve



SUNNY ISLAND 3.0M / 4.4M

Technical data	Sunny Island 3.0M	Sunny Island 4.4M
Operation on the utility grid or generator		
Rated input voltage / AC input voltage range	230 V / 172.5 V ... 264.5 V	230 V / 172.5 V ... 264.5 V
Rated input frequency / permitted input frequency range	50 Hz / 40...Hz ... 70 Hz	50 Hz / 40 Hz ... 70 Hz
Maximum AC input current	50 A	50 A
Maximum AC input power	11,500 W	11,500 W
Stand-alone or emergency power operation		
Rated grid voltage / AC voltage range	230 V / 202 V ... 253 V	230 V / 202 V ... 253 V
Rated frequency / frequency range (adjustable)	50 Hz / 45 Hz ... 65 Hz	50 Hz / 45 Hz ... 65 Hz
Rated power (for Unom / fnom / 25°C / cos ϕ = 1)	2,300 W	3,300 W
AC power at 25°C for 30 min / 5 min / 3 s	3,000 W / 3,500 W / 5,500 W	4,400 W / 4,600 W / 5,500 W
AC power at 45°C continuously	2,000 W	3,000 W
Rated current / short-circuit current (peak)	10 A / 60 A	14.5 A / 60 A
THD output voltage / power factor with rated power	< 4.5% / -1 ... +1	< 4.5% / -1 ... +1
Battery DC input		
Rated input voltage / DC voltage range	48 V / 41 V ... 63 V	48 V / 41 V ... 63 V
Maximum battery charging current / rated DC charging current / DC discharging current	51 A / 45 A / 51 A	75 A / 63 A / 75 A
Battery type / battery capacity (range)	Li-ion*, FLA, VRLA / 100 Ah ... 10,000 Ah (lead) 50 Ah ... 10,000 Ah (li-ion)	Li-ion*, FLA, VRLA, / 100 Ah ... 10,000 Ah (lead) 50 Ah ... 10,000 Ah (li-ion)
Charge control	IUoU charge procedure with automatic full charge and equalization charge	IUoU charge procedure with automatic full charge and equalization charge
Efficiency / self-consumption		
Maximum efficiency	95.3%	95.3%
Self-consumption without load / standby	18 W / 6.8 W	18 W / 6.8 W
Protective devices (equipment)		
AC short-circuit / AC overload	● / ●	● / ●
DC reverse polarity protection / DC fuse	– / –	– / –
Overtemperature / battery deep discharge	● / ●	● / ●
Overvoltage category as per IEC 60664-1	III	III
General data		
Dimensions (width x height x depth)	467 mm x 612 mm x 242 mm (18.4 inches / 24.1 inches / 9.5 inches)	467 mm x 612 mm x 242 mm (18.4 inches / 24.1 inches / 9.5 inches)
Weight	44 kg (97 lbs)	44 kg (97 lbs)
Operating temperature range	-25°C ... +60°C (-13°F ... +140°F)	-25°C ... +60°C (-13°F ... +140°F)
Protection class according to IEC 62103	I	I
Climatic category according to IEC 60721	3K6	3K6
Degree of protection according to IEC 60529	IP54	IP54
Features / function		
Operation and display / multifunction relay	External via SRC-20 / 2	External via SRC-20 / 2
Three-phase systems / battery backup function	● / ●	● / ●
State of charge calculation / full charge / equalization charge	● / ● / ●	● / ● / ●
Integrated soft start / generator support	● / ●	● / ●
Battery temperature sensor / data cables	● / ●	● / ●
Certificates and approvals	www.SMA-Solar.com	www.SMA-Solar.com
Warranty	5 years	5 years
Accessories		
For off-grid applications		
Battery cable / battery fuse	○ / ○	○ / ○
Interface SI-COMSMA (RS485)	○	○
Load-shedding contactor / external battery current measurement	○ / ○	○ / ○
Sunny Island Charger SIC50-MPT	○	○
For on-grid applications		
Battery cable / battery fuse	○ / ○	○ / ○
Interface SWDMSI-NR (Speedwire)	○	○
Sunny Home Manager / SMA Energy Meter	○ / ○	○ / ○
Automatic transfer switch for battery backup (procurement via external supplier)	○	○
Type designation	SI3.0M-11	SI4.4M-11
● Standard features ○ Optional features – Not available		
Data at nominal conditions		
* from Akasol, Leclanché, LG-Chem, SAFT, Samsung, Sony, Dispatch Energy, Hoppecke		
All specifications as at: August 2014		

SMA Off-Grid Configurator

Design and simulation program for off-grid systems

www.SMA-Solar.com

SMA Solar Technology