/ SI4.4M-13 / SI6.0H-13 / SI8.0H-13



Sunny Island

4.4M / 6.0H / 8.0H for on-grid and off-grid applications

The most reliable all-purpose solution – easier than ever

Compatible with numerous approved batteries

Communicative
- Sunny Portal powered by ennexOS
- Communications via Ethernet
- Commissioning via LAN
- Webconnect
- Optimized data logging

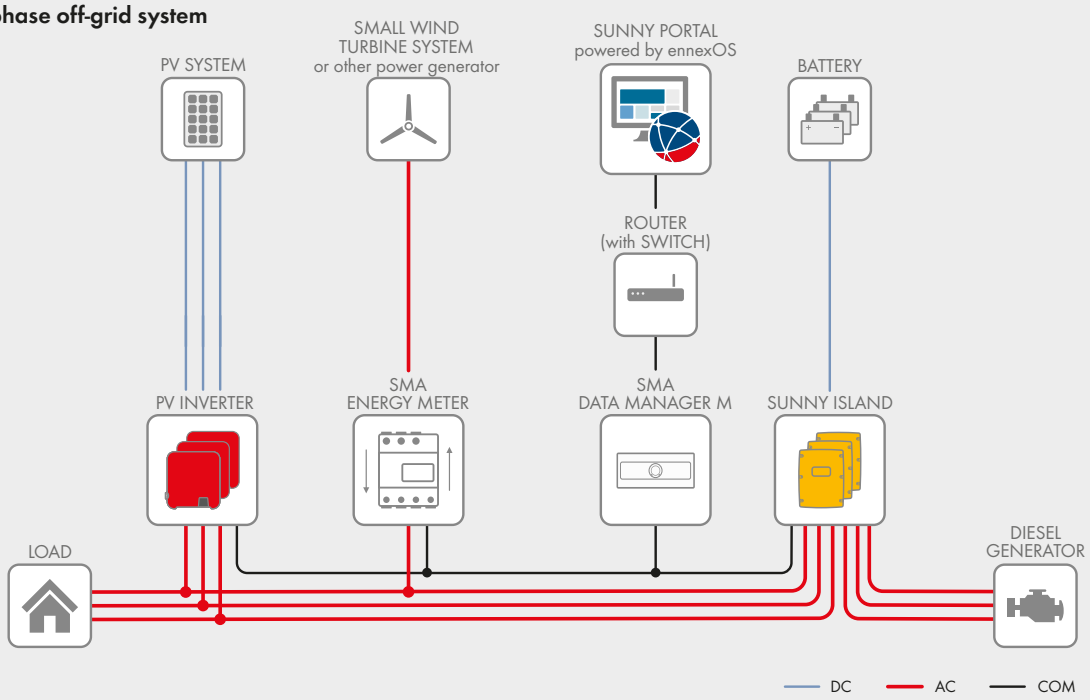
Reliable
- Particularly high overload capability
- IP54 for reliable operation in extreme environments

Flexible
- Works with self-consumption systems, battery backup systems and off-grid systems
- For single- and three-phase systems
- Modular and extendable
- For lead-acid batteries and approved lithium-ion batteries from various manufacturers
- An extensive list of approved batteries with continuous expansion of the battery portfolio

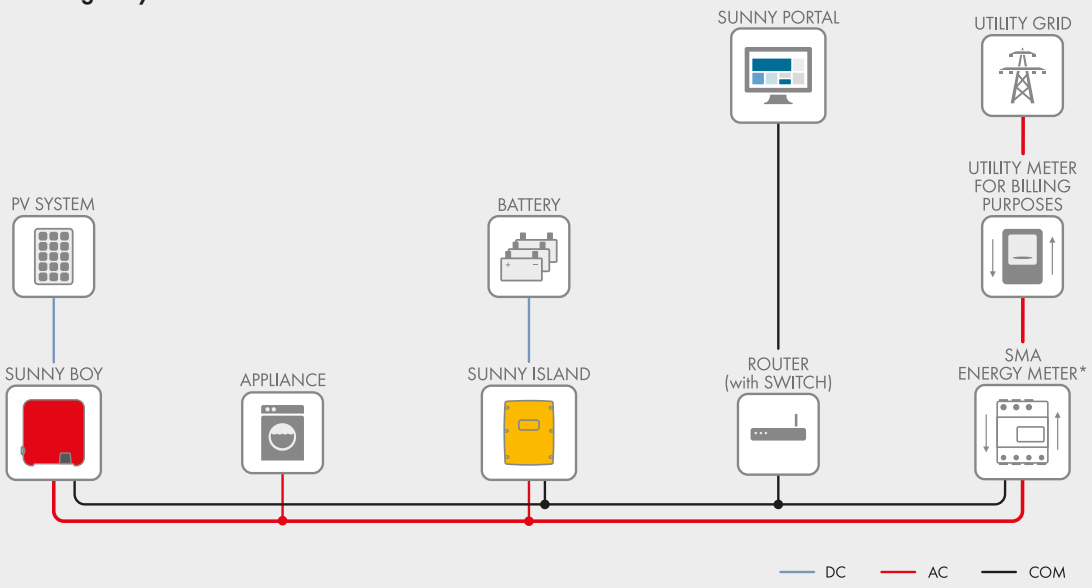
The Sunny Island battery inverter supports a wide range of on- and off-grid installations with compelling features – from operation in off-grid areas to home energy management.

Users can benefit from SMA's experience in having installed more than 150,000 Sunny Island inverters worldwide. Thanks to its integrated web interface, the Sunny Island 4.4M / 6.0H / 8.0H can easily be commissioned and configured. And being a core element in the SMA Flexible Storage System, the Sunny Island temporarily stores self-generated power in the battery thus making it possible to use solar power around-the-clock.
Its high protection class, wide temperature range and exceptional overload capacity always provide the kind of reliability needed for any kind of application. Intelligent load and energy management keeps the system running even in critical situations.
The Sunny Island is the ultimate all-purpose solution.

Three-phase off-grid system

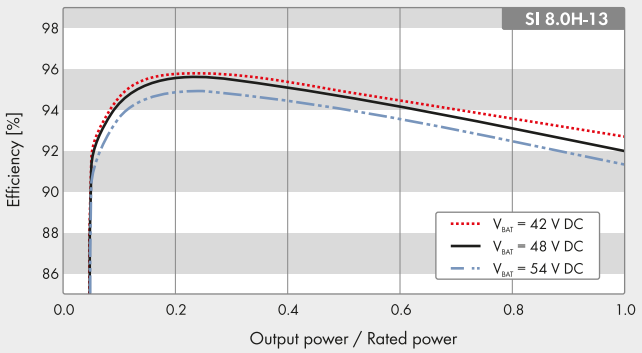


Single-phase on-grid system

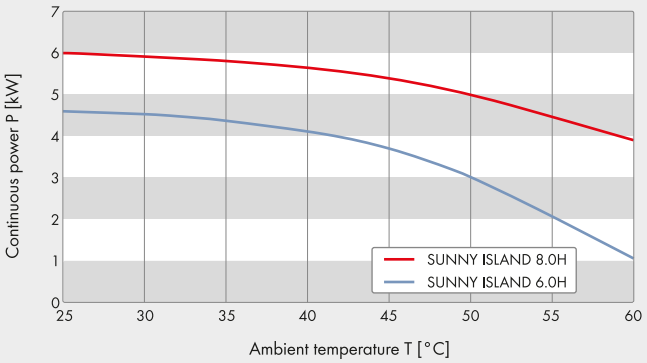


* Other functions with SMA Energy Meter powered by ennexOS and Sunny Home Manager 2.0 are possible.

Efficiency curve



Power-temperature curve



Technical Data	Sunny Island 4.4M	Sunny Island 6.0H	Sunny Island 8.0H
AC-2 (External source: utility grid or generator)			
Rated grid voltage / AC voltage range	230 V / 172.5 V to 264.5 V		
Rated grid frequency / permitted frequency range	50 Hz / 40 Hz to 70 Hz		
Maximum AC current for increased self-consumption (grid operation)	14.5 A	20 A	26.1 A[5]
Maximum apparent AC power for increased self-consumption (grid operation)	3.3 kVA	4.6 kVA	6 kVA[5]
Maximum AC input current	50 A	50 A	50 A
Maximum AC input power	11500 W	11500 W	11500 W
Power factor range	0.8 overexcited to 0.8 underexcited		
AC-1 (Stand-alone mode, battery-backup operation, load)			
Rated grid voltage / AC voltage range	230 V / 202 V to 253 V		
Rated frequency / frequency range (adjustable)	50 Hz / 45 Hz to 65 Hz		
Rated power (at Unom, fnom / 25°C / cos φ = 1)	3300 W	4600 W	6,000 W
AC power at 25 °C for 30 min / 5 min / 3 sec	4400 W / 4600 W / 5500 W	6000 W / 6800 W / 11000 W	8000 W / 9100 W / 11000 W
AC power at 45°C continuously	3000 W	3700 W	5430 W
Rated current / maximum output current (60 ms)	14.5 A / 60 A	20 A / 120 A	26.1 A / 120 A
Total harmonic distortion output voltage	< 5%	< 1.5%	< 1.5%
Power factor range	0.0 overexcited to 0.0 underexcited		
Battery DC input			
Rated input voltage / DC voltage range	48 V / 41 V to 63 V	48 V / 41 V to 63 V	48 V / 41 V to 63 V
Maximum battery charging current / DC rated charging current / DC rated discharging current	75 A / 63 A /75 A	110 A / 90 A / 103 A	140 A / 115 A /136 A
Battery type / battery capacity (range)	Li-Ion[1], FLA, VRLA / 100 Ah to 10000 Ah (lead-acid) 50 Ah to 10000 Ah (li-Ion)		
Charge control	IUoU charge procedure with automatic full charge and equalization charge		
Efficiency / self-consumption of the device			
Maximum efficiency	95.5%	95.8%	95.8%
No-load consumption / standby	18 W / 6.8 W	25.8 W / 6.5 W	25.8 W / 6.5 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		
General Data			
Dimensions (W / H / D)	467 mm / 612 mm / 242 mm (18.4 inches / 21.1 inches / 9.5 inches)		
Weight	44 kg (97 lb)	63 kg (138.9 lb)	63 kg (138.9 lb)
Operating temperature range	–25°C to +60°C (–13°F to +14°F)		
Protection class as per IEC 62103	I		
Climatic category as per IEC 60721	3K6		
Degree of protection according to IEC 60529	IP54		
RoHS-III compliant	●		
Equipment / Function			
Speedwire / Webconnect / SI-SYSCAN (Multicluster)	● / ● / –	● / ● / ○	● / ● / ○
Direct connection to Sunny Portal via Webconnect	●		
Sunny Portal powered by ennexOS via SMA Data Manager M or L	●		
Micro SD memory card for extended data logging	○		
Display via smartphone[7], tablet[7], laptop / multifunction relay	● / 2		
Three-phase systems (including rotating magnetic field)[2] / battery-backup function	● / ●		
State of charge calculation / full charge / equalization charge	● / ● / ●		
Battery temperature sensor / data cables	○ / ●		
Certificates and approvals	www.SMA-Solar.com		
Cover color yellow / aluminum white	○ / ○		
Warranty 5 years	●		
For off-grid applications			
Switching times for backup operation (without switch box or MC-Box)[3]	–	0 ms (high impedance) / 20 ms (low impedance)	
Automatic rotating magnetic field detection / generator support	● / ●		
Parallel connection / Multicluster	– / –	● / ●	● / ●
Integrated soft start	●		
Accessories			
For off-grid applications			
Multicluster boxes: MC-BOX-6.3 / MC-BOX-12.3 / MC-BOX-36.3	○		
Battery fuse[4]	○		
SMA Data Manager M	○		
For on-grid applications			
Sunny Home Manager / SMA Energy Meter	○ / ○		
Automatic transfer switch for battery backup[4]	○		
Type designation	SI4.4M-13[6]	SI6.0H-13	SI8.0H-13

● Standard features ○ Optional features – Not available All specifications, last updated: 10/2025

1) See "List of Approved Batteries" at www.SMA-Solar.com 2) 3 x Sunny Island 3) See "Switchovertime-TI-en-11 | Version 1.1" at www.SMA-Solar.com 4) Procurement via external suppliers 5) Different limitation depending on the configured country data set (e.g., VDE-AR-N 4105:2018 = 4.6 kVA and 20 A) 6) SI4.4-13 is not approved for on-grid use in Australia and New Zealand (ANZ market) 7) Display via smartphone and tablet, e.g., over home Wi-Fi network

SUNNY PORTAL powered by ennexOS

Energy Balance and System Analysis at a Glance



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Battery inverter made in Germany by SMA Solar Technology AG.

SMAM-BOH-13-DS-en-40

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