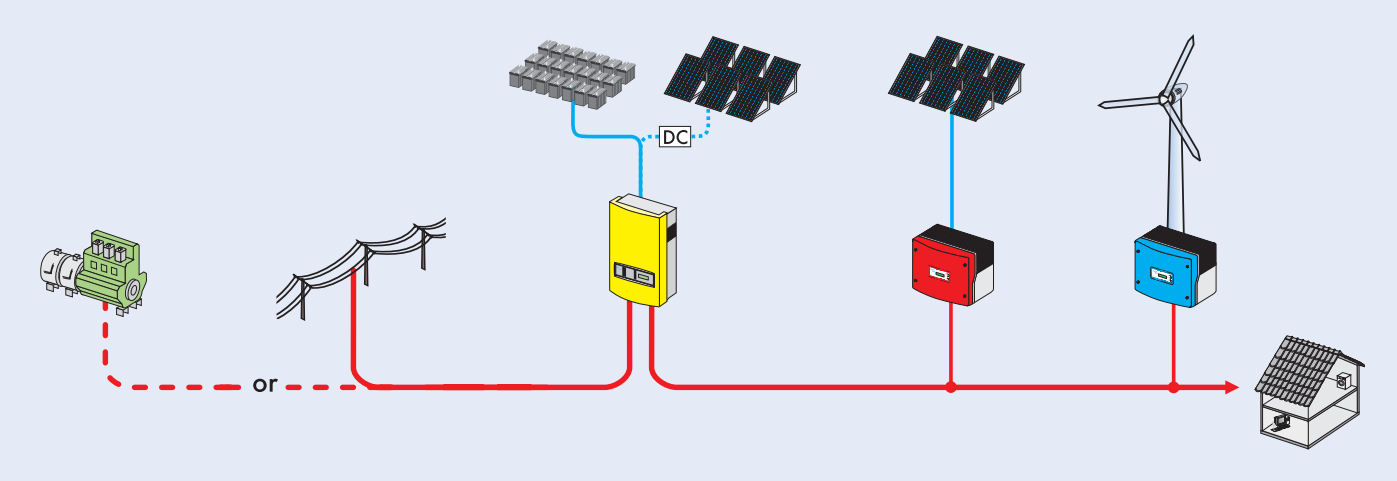
Sunny Island 3324/4248

Stand-alone inverter for hybrid and backup applications

- Suitable for systems from 2 kW to 5.4 kW
- The only inverter with AC coupling for all energy sources
- Fully automatic uninterrupted operation
- Robust and reliable
- Excellent overload characteristics
- Easy installation
- Long battery service life thanks to optimum battery management system
- Compatible with Sunny Family products

The Sunny Island 3324/4248 is the system manager of a stand-alone power supply. Its service life of over 20 years makes it a future-proof investment. The Sunny Island 3324/4248 also works reliably under extreme ambient conditions, such as high temperatures or excessive dust.
The AC coupling developed by SMA provides maximum flexibility in expanding the system and reduces installation efforts and costs.
Other AC sources can be easily connected to the AC bus and therefore substantially increase performance on the AC side. This allows batteries and generators to be dimensioned smaller. The integrated smooth startup mode allows all loads to be started safely.



Schematic drawing of Sunny Island 3324/4248

The Sunny Island 3324/4248 is 100% short-circuit proof and due to its intelligent short-circuit control, it can quickly trip commercial circuit breakers. In a backup system, the Sunny Island practically disconnects itself from the public network without interruption (<20 ms) and enables continued power supply. Using a laptop or the diverse SMA communication products, you can easily monitor and control your systems from anywhere in the world via the Internet.

Technical data

		SI 3324	SI 4248
Output data			
Rated AC voltage (adjustable)	U_{AC}	230 V (202 – 253 V)	230 V (202 – 253 V)
Grid frequency (adjustable)	f	50 Hz (45 – 55 Hz)	50 Hz (45 – 55 Hz)
Continuous AC output at 25 °C / 45 °C	P_{nom}	3300 / 2300 W	4200 / 3400 W
Continuous AC output at 25 °C for 30 / 5 / 1 min	P30 / 5 / 1	4200 / 4600 / 5000 W	5400 / 6200 / 7000 W
Rated AC current	$I_{AC, nom}$	14.5 A	18 A
Max. current (peak value) for 100 ms		100 A	100 A
Output voltage harmonic distortion factor	K_{VAC}	< 3 %	< 3 %
Power factor	cos φ	-1 to +1	-1 to +1
Input data			
Input voltage	$U_{AC, ext}$	230 V (172.5 – 250 V)	230 V (172.5 – 250 V)
Input frequency	f_{ext}	50 Hz (40 – 60 Hz)	50 Hz (40 – 60 Hz)
Max. AC input current	$I_{AC, ext}$	56 A (2 – 56 A)	56 A (2 – 56 A)
Max. input power	$P_{AC, ext}$	12.8 kW	12.8 kW
Battery data			
Battery voltage (range)	U_{Bat}	24 V (21 – 32 V)	48 V (41 – 63 V)
Max. battery charging current	$I_{Bat, max}$	140 A	100 A
Continuous charging current	$I_{Bat, nom}$	104 A	80 A
Battery capacity	C_{Bat}	100 – 6000 Ah	100 – 6000 Ah
Charge control		IU$_0$U with automatic full charge and equalization charge	IU$_0$U with automatic full charge and equalization charge
Efficiency/power consumption			
Max. efficiency (typical)	η	94.5 %	95 %
Own consumption (no load/standby)		22 W (< 4 W)	22 W (< 4 W)
Protection type acc. to DIN EN 60529		IP30	IP30
Device protection		Short-circuit, overload, overtemperature	Short-circuit, overload, overtemperature
Interfaces		2 LEDs, 4 buttons, 2-line display, 1 relay for load break, 1 relay for diesel generator controlling, RS485/RS232 electrically separated (optional)	2 LEDs, 4 buttons, 2-line display, 1 relay for load break, 1 relay for diesel generator controlling, RS485/RS232 electrically separated (optional)
Mechanical data			
Width / Height / Depth		390 / 590 / 245 mm	390 / 590 / 245 mm
Weight		39 kg	39 kg
Ambient conditions			
Ambient temperature		from -25 °C to +50 °C	from -25 °C to +50 °C
Guarantee (EU)		2 years	2 years
Accessories			
Ext. Battery temperature sensor		included	included
Generator management "GenMan"		optional	optional