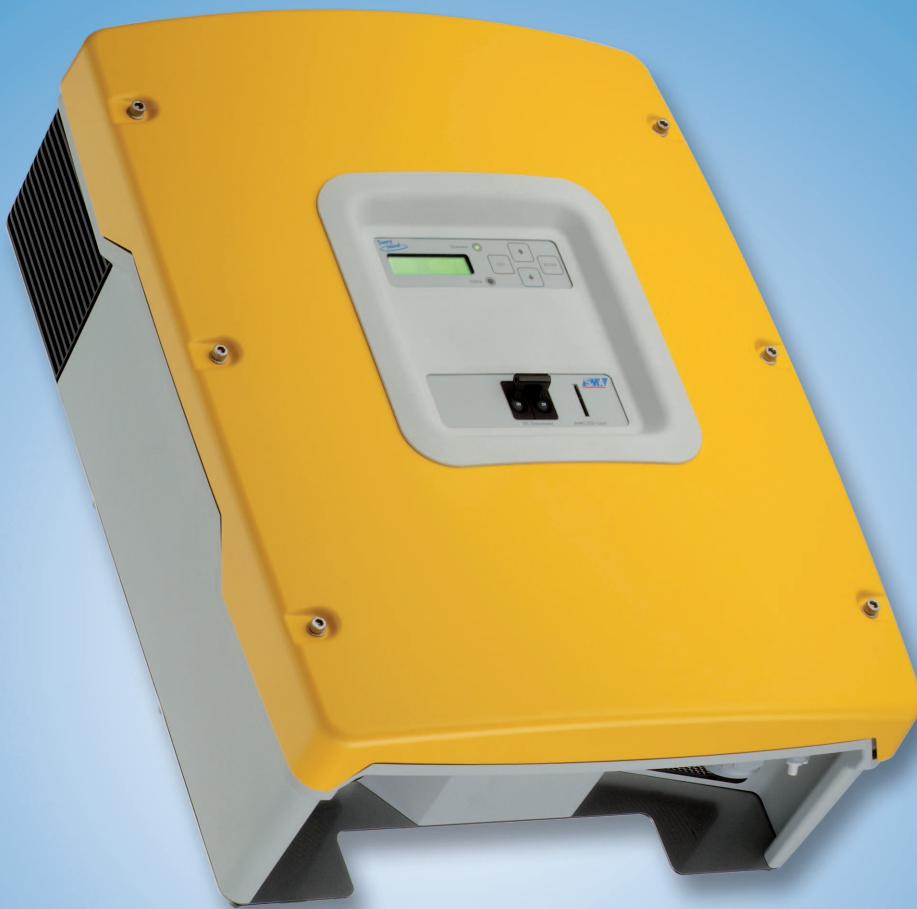


Sunny Island 5048



New Stand-alone Inverter for Hybrid Applications



Suitable for systems from
3 kW to 78 kW

AC coupling of all energy
sources

Fully automatic uninterrupted
operation

1- and 3-phase, connectable
in parallel and modularly
extendable

Excellent overload
characteristics

Long battery service life
due to optimum battery
management system and
state of charge evaluation

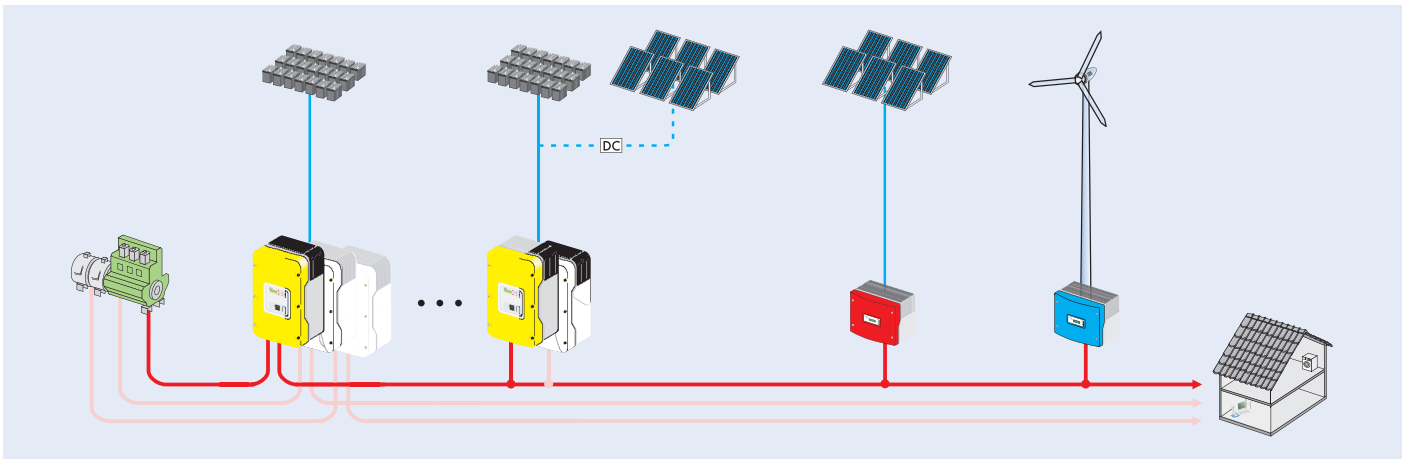
Robust, reliable and durable

Compatible with Sunny Family
products

The new Sunny Island 5048 features the following innovative product characteristics: ergonomic aluminum enclosure, high efficiency and OptiCool® active ventilation system. Thus, the Sunny Island 5048 is the optimal solution for all off-grid applications which require high quality electricity for the establishment of a reliable AC voltage grid based on renewable energy sources.

Its reliable 5 kW output power is ideal for use particularly in special climatic conditions. The intuitive interface facilitates installation and commissioning.





Schematic drawing of Sunny Island 5048

The long service life of over 20 years, and the possibility to gain a comfortable overview of system data with the aid of a removable data storage (MMC/SD card) and comprehensive technical support add to the list of advantages for the system operator. The Sunny Island 5048 coordinates stand-alone power supplies with outputs of up to 78 kW by allowing up to four devices to be connected in parallel on a single phase. With the ability to set up 3-phase grids and to manage generators for fuel saving operation, the Sunny Island 5048 is the perfect addition to the Sunny Island family.

Technical Data

		SI 5048	
Output data			
Nominal AC voltage (adjustable)	U_{AC}	230 V (202 - 253 V)	
Grid frequency adjustable	f	45 - 65 Hz	
Continuous AC output at 25 °C / 45 °C	P_{nom}	5000 / 4000 W	
Continuous AC output at 25 °C for 30 / 5 / 1 min	$P_{30 / 5 / 1}$	6500 / 7200 / 8400 W	
Nominal AC current	$I_{AC, nom}$	21 A	
Max. current		100 A (for 100 ms)	
Output voltage harmonic distortion factor	K_{VAC}	< 3 %	
Power factor	$\cos \varphi$	-1 to +1	
Input data			
Input voltage (range)	$U_{AC, ext}$	230 V (172.5 - 250 V)	
Input frequency	f_{ext}	40 - 70 Hz	
Max. AC input current (adjustable)	$I_{AC, ext}$	56 A (2 - 56 A)	
Max. input power	$P_{AC, ext}$	12.8 kW	
Battery data			
Battery voltage (range)	U_{Bat}	48 V (41 - 63 V)	
Max. battery charging current	$I_{Bat, max}$	120 A	
Continuous charging current	$I_{Bat, nom}$	100 A	
Battery capacity	C_{Bat}	100 - 10000 Ah	
Charge control		I_{U_0U} with automatic full and equalization charge	
Efficiency/power consumption			
Max. efficiency (typical)	η	95 %	
Own consumption with no load (standby)		25 W (< 4 W)	
Protection type (DIN EN 60529)		IP40	
Device protection		short-circuit, overload, overtemperature	
Interfaces		2 LEDs, 4 buttons, 2-line display, 2 multifunction relays, RS485/RS232 electrically separated (optional), MMC/SD card	
Mechanical data			
Width/height/depth (mm)		467 / 612 / 235	
Weight		63 kg	
Ambient conditions			
Ambient temperature		-25 to +50 °C	
Warranty (EU)		2 years	
Accessories			
Ext. battery temperature sensor		included	
"GenMan" generator manager		optional	