

Multi RS Solar 48/6000

With 450V/4000W PV input

www.victronenergy.com



Multi RS Solar 48/6000

Hybrid Inverter/Charger

The Multi RS Solar 48/6000 is a 48V 6kVA Inverter/Charger with 450VDC 4kWp PV input.

Combination of an inverter, AC charger, and Solar MPPT

The inverter produces a perfect sine wave, and able to supply high powered appliances. It is also bi-directional, charging the battery when excess solar power or AC supply is available, or converting from the battery when it is needed.

Wide MPPT voltage range

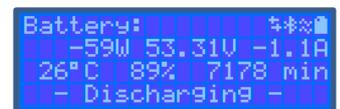
80 – 450VDC, with a 120 VDC PV startup voltage.

Light weight, efficient and quiet

Thanks to high frequency technology and a new design this powerful inverter weighs only 11kg. In addition to this it has an excellent efficiency, low standby power, and a very quiet operation.

Display, Bluetooth and VictronConnect app

The display reads battery, inverter and solar parameters. The same parameters can be accessed with a smartphone or other Bluetooth enabled device, using the VictronConnect app.



Extendable PV capacity, both AC-coupled and DC-coupled

The integrated 4kWp PV capacity can be extended by adding Solar Chargers to the system, for example our Smart Solar Charger range, including the Smart Solar RS models. When connected in a VE.Can network, all battery charging will operate synchronously and coordinated.

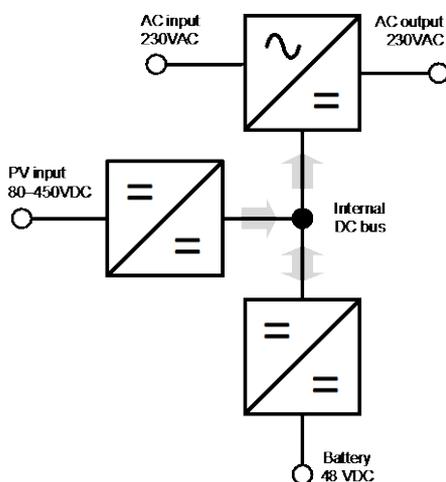
Alternatively, the PV capacity can be extended by installing PV Inverters, of which the output power will be automatically controlled by the integrated Frequency Shift Power Control.

Communication ports

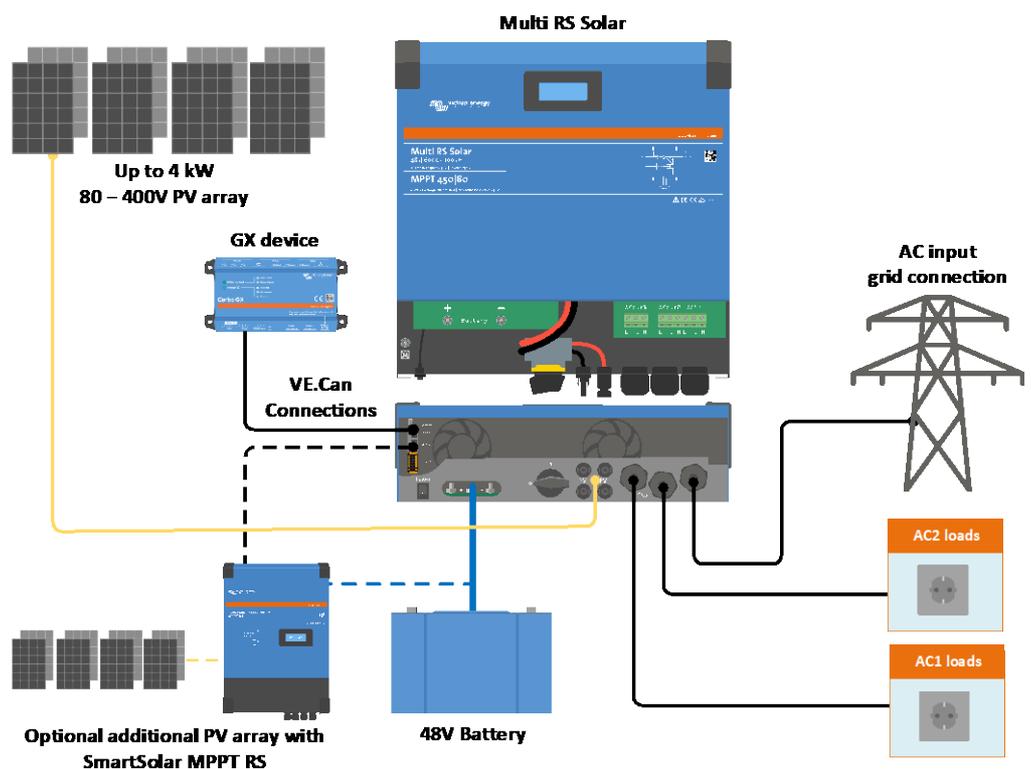
VE.Can connection to a GX device for system monitoring, data logging, and remote firmware updates. VE.Direct connection to a GlobalLink 520 for remote data monitoring.

I/O Connections

Programmable Relay, temperature sensor and voltage sensor connections. The remote input can also be configured to accept the Victron smallBMS.



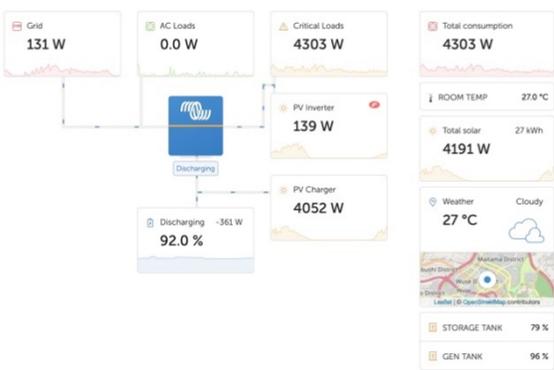
Inside the Multi RS 48V 6000VA





Configure and monitor with VictronConnect

A built in Bluetooth Smart connection allows for quick monitoring or settings adjustment of the Multi RS.



VRM Portal

When the Multi RS is connected to a GX device with internet connection, you can access our free remote monitoring website (VRM). This will display all your system data in a comprehensive graphical format. System settings can be changed remotely via the portal. Alarms can be received by e-mail.

Multi RS Solar	48/6000
INVERTER	
DC Input voltage range	38 – 64 V (1)
Output	Output voltage: 230 VAC ± 2% Frequency: 50 Hz ± 0,1% (2)
Continuous output power at 25°C	Increases linearly from 4800 W at 46 VDC to 5300 W at 52 VDC
Continuous output power at 40°C	4500 W
Continuous output power at 65°C	3000 W
Peak power	9 kW for 3 seconds
Short-circuit output current	74 A
Max. inverter output AC overcurrent protection	30 A
Maximum efficiency	96,5 % at 1 kW load 94% at 5 kW load
Zero load power	20 W
Low Battery shutdown	37.2 V (adjustable)
Low battery restart	43.6 V (adjustable)
SOLAR	
Maximum DC voltage	450 V
Start-up voltage	120 V
MPPT operating voltage range	80 – 450 V (3)
Max operational PV input current	18 A
Max PV Short circuit current reverse polarity protection	20 A
Max PV short circuit current (Isc PV)	30 A
Earth leakage trip level	30 mA
Isolation fail level (detection before start-up)	100 kΩ
CHARGER	
Programmable Charger voltage range (V DC) (5)	36 – 62 V
Charge voltage 'float' (V DC)	55,2 V
Maximum charge current	100 A
AC input current limit	31 A
Battery temperature sensor	Yes
Maximum DC charging power	4000 W
GENERAL	
Parallel and 3-phase operation	no
Programmable relay (4)	Yes
Protection (5)	a - g
Data Communications Ports	VE.Direct port and VE.Can port (6)
General purpose analogue/digital in port	Yes, 2x
Remote on-off	Yes
Operating temperature range	-40 to +65°C (fan assisted cooling)
Humidity (non-condensing)	max 95%
ENCLOSURE	
Material & Colour	steel, blue RAL 5012
Protection category	IP21
Battery-connection	M8 bolts
230 V AC-connection	Screw terminals 13 mm ² (6 AWG)
Weight	11 kg
Dimensions (hwxwd)	425 x 440 x 125 mm
STANDARDS	
Safety	EN-IEC 60335-1, EN-IEC 60335-2-29, EN-IEC 62109-1, EN-IEC 62109-2
Emission, Immunity	EN 55014-1, EN 55014-2 EN-IEC 61000-3-2, EN-IEC 61000-3-3 IEC 61000-6-1, IEC 61000-6-2, IEC 61000-6-3
<p>1) Minimum start-up voltage is 41V. Inverter shutdown can be set as low as 32V DC, but may shut down on low AC output voltage (due to load). Over-voltage disconnect is 65.5V. Charger set-point can be set to max 62V. The charge current derates above 57V.</p> <p>2) Can be adjusted to 60 Hz</p> <p>3) MPPT operating range is also constrained by battery voltage - PV VOC should not exceed 8x battery float voltage, e.g. a 50V battery voltage maximum should have 400V maximum PV array. – see product manual for further information.</p> <p>4) Programmable relay which can be set for general alarm, DC under voltage or genset start/stop function. DC rating: 4A up to 35VDC and 1A up to 70VDC</p> <p>5) Protection key: a) output short circuit b) overload c) battery voltage too high d) battery voltage too low e) temperature too high f) 230 VAC on inverter output g) Solar earth leakage</p> <p>6) Connection to a GX device (i.e. Cerbo GX) must be made via the VE.Can interface. The VE.Direct interface is for connection to the GlobalLink 520, and to a computer, using a VE.Direct to USB to cable.</p>	