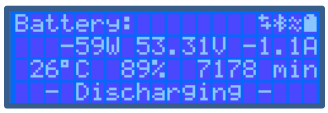
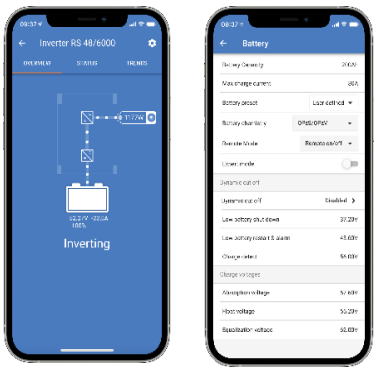
Inverter RS 48/6000 Smart

www.victronenergy.com



Inverter RS Smart 48/6000





Configure and monitor with VictronConnect
A built-in Smart Bluetooth connection allows for quick monitoring or settings adjustment of the Inverter RS.

Light weight, efficient and quiet

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

Display and Bluetooth

The display reads battery and inverter parameters.
The same parameters can be accessed with a smartphone or other Bluetooth enabled device. In addition, Bluetooth can be used to set up the system and to change settings with VictronConnect.

VE.Can and VE.Direct port

VE.Can connection to a GX device for system monitoring, energy meter[6], 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.

Inverter RS Smart	48/6000
INVERTER	
DC Input voltage range	38 – 62 V [4]
Output	Output voltage: 230 VAC ± 2 % Frequency: 50 Hz ± 0.1 % [1] Maximum continuous inverter current: 25 A AC
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 7 kW for 4 minutes
Short-circuit output current	50 A
Maximum efficiency	96.5 % at 1 kW load 94 % at 5 kW load
Zero load power	20 W
CHARGER	
Programmable Charger voltage range (VDC)	36 – 60 V
Charge voltage 'absorption' (VDC)	Default setting: 57.6 V (adjustable)
Charge voltage 'float' (VDC)	Default setting: 55.2 V (adjustable)
Maximum AC coupled solar charging power	5000 W [5]
Maximum charge current	88 A @ 57.6V
Battery temperature sensor	Included
Battery voltage sense	Yes
GENERAL	
Parallel and 3-phase operation	12 parallel units supported, 3 phase supports 4 units per phase
Programmable relay [3]	Yes
Protection [2]	a - g
Data Communications	VE.Direct port, VE.Can port & Bluetooth
Bluetooth frequency & power	2402 – 2480 MHz, 4dBm
General purpose analogue/digital in port	Yes, 2x
Remote on-off	Yes
Operating temperature range	-40 to +65 °C (fan assisted cooling)
Maximum altitude	2000 m
Humidity (non-condensing)	max 95 %
ENCLOSURE	
Material & Colour	steel, blue RAL 5012
Protection category	IP21
Battery-connection	M8 bolts
230 VAC-connection	Screw terminals 10 mm² (6 AWG)
Weight	11 kg
Dimensions (hxwxd)	425 x 440 x 125 mm
STANDARDS	
Safety	EN-IEC 60335-1, 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, Pollution degree 2
Overvoltage category	Battery: OVC I, AC Out: OVC II

1) Can be adjusted to 60 Hz.
2) 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.
3) Programmable relay which can be set for general alarm, DC under voltage or genset start/stop function. DC rating: 4 A up to 35 VDC and 1 A up to 70 VDC.
4) Minimum start-up voltage is 41 V. Inverter shutdown can be set as low as 32 VDC but may shut down on low AC output voltage (due to load). Over-voltage disconnect is 65.5 V.
5) AC coupled solar charging requires an external PV inverter to be connected on a circuit at the AC output of the Inverter RS.
6) Connectivity to the Victron VM-3P75CT energy meter must be made via VE.Can, Ethernet connectivity is not currently supported.

Victron Energy B.V. | De Paal 35 | 1351 JG Almere | The Netherlands
E-mail: sales@victronenergy.com
www.victronenergy.com