# Inverter RS 48/6000 Smart

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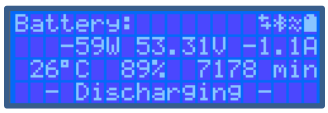


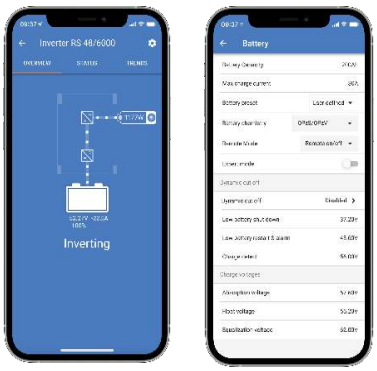


**Configure and monitor with VictronConnect**
A built-in Smart Bluetooth connection allows for quick monitoring or settings adjustment of the Inverter RS.

## 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 %<br>Frequency: 50 Hz ± 0.1 % [1]<br>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<br>7 kW for 4 minutes |
| Short-circuit output current | 50 A |
| Maximum efficiency | 96.5 % at 1 kW load<br>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<br>IEC 61000-6-1, IEC 61000-6-2, IEC 61000-6-3 |

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.

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