Quattro-II Inverter/Charger

► Victron online product page





Connection Area
Quattro-II 48/5k

A Quattro, plus ESS (Energy Storage System) functionality

The Quattro-II can be connected to two independent AC sources, for example the public grid and a generator, or two generators. The Quattro-II will automatically connect to the active source.

PowerControl and PowerAssist - Boosting the capacity of the grid or a generator

A maximum grid or generator current can be set. The Quattro-II will then take account of other AC loads and use whatever is extra for battery charging, thus preventing the generator or grid from being overloaded (PowerControl function).
PowerAssist takes the principle of PowerControl to a further dimension. Where peak power is so often required only for a limited period, the Quattro-II will compensate insufficient generator, shore or grid power with power from the battery. When the load reduces, the spare power is used to recharge the battery.

Solar energy: AC power available even during a grid failure

The Quattro-II can be used in off grid as well as grid connected PV and other alternative energy systems. It is compatible with both solar charge controllers and grid-tie inverters.

Two AC Outputs

The main output has no break functionality. The Quattro-II takes over the supply to the connected loads in the event of a grid failure or when shore/generator power is disconnected. This happens so fast (less than 20 milliseconds) that computers and other electronic equipment will continue to operate without disruption.
The second output is live only when AC is available on the input. Loads that should not discharge the battery, like a water heater for example, can be connected to this output.

Parallel and three phase operation

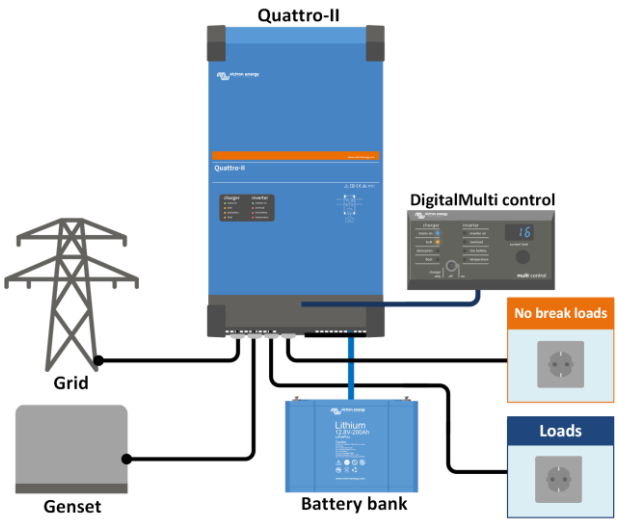
Up to 6 Quattros can operate in parallel to achieve higher power output. Six 48/5000/70 units, for example, will provide 25 kW / 30 kVA output power with 420 Amps charging capacity.
In addition to parallel connection, three units of the same model can be configured for three phase output, and up to 6 sets of three units can be parallel connected per phase for a 75 kW / 90 kVA inverter and more than 1200 Amps charging capacity.

On-site system configuring, monitoring and control

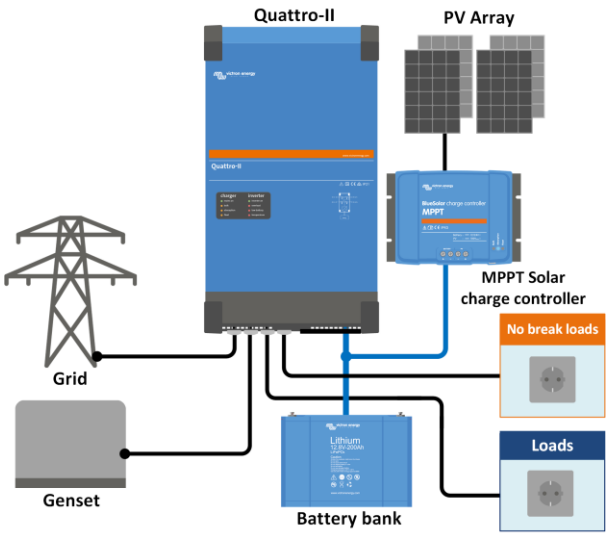
Settings can be changed in a matter of minutes with VEConfigure software (computer or laptop and MK3-USB interface needed).
Several monitoring and control options are available: Cerbo GX, Ekrano GX, laptop, computer, Bluetooth (with the optional VE.Bus Smart dongle), Battery Monitor, Digital Multi Control Panel.

Remote configuring and monitoring

Install a Cerbo GX or other GX product to connect to the internet.
Operational data can be stored and displayed on our VRM (Victron Remote Management) website, free of charge.
When connected to the internet, systems can be accessed remotely, and settings can be changed.



Standard marine, mobile or off-grid application
Loads that should shut down when AC input power is not available can be connected to a second output. These loads will be taken into account by the PowerControl and PowerAssist function in order to limit AC input current to a safe value when AC power is available.



Application with MPPT solar charge controller





Ekrano GX or Cerbo GX
Provides intuitive system control and monitoring and enables access to our free remote monitoring website: the VRM Online Portal.



VRM Portal
Our free remote monitoring website (VRM) 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 or push notification.



VRM app
Monitor and manage your Victron Energy system from your smart phone and tablet. Available for both iOS and Android.

Quattro-II	24/5000/120-50	48/5000/70-50
PowerControl & PowerAssist	Yes	
Transfer switch	50 A	
Maximum AC input current	50 A	
INVERTER		
DC Input voltage range	19–33 V	38-66 V
Output	Output voltage: 230 VAC ± 2 %	Frequency: 50 Hz ± 0,1 % (1)
Cont. output power at 25 °C (3)	5000 VA	
Cont. output power at 25 °C	4000 W	
Cont. output power at 40 °C	3700 W	
Cont. output power at 65 °C	3000 W	
Maximum apparent feed-in power	5000 VA	
Peak power	9000 W	
Maximum efficiency	96 %	
Zero load power	18 W	
Zero load power in AES mode	12 W	
Zero load power in Search mode	2 W	
CHARGER		
AC Input	Input voltage range: 187-265 VAC Input frequency: 45 – 65 Hz power factor: 1	
Charge voltage 'absorption'	28,8 / 57,6 V	
Charge voltage 'float'	27,6 / 55,2 V	
Storage mode	26,4 / 52,8 V	
Max. battery charge current (4)	120 A	70 A
Battery temperature sensor	Yes	
GENERAL		
Auxiliary output	Yes (32 A) Default setting: switches off when in inverter mode	
Programmable relay (5)	Yes	
Protection (2)	a – g	
VE.Bus communication port	For parallel and three phase operation, remote monitoring and system integration	
General purpose com. 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 VAC-connection	Screw terminals 13 mm² (6 AWG)	
Weight	31 kg	29 kg
Dimensions (hxwxd)	607 x 329 x 149 mm	565 x 320 x 148 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	
Uninterruptible power supply	Please consult the certificates on our website.	
Anti-islanding	Please consult the certificates on our website.	

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) input voltage ripple too high

3) Non-linear load, crest factor 3:1
4) Up to 25 °C ambient
5) Programmable relay which can be set for general alarm, DC under voltage or genset start/stop function. AC rating: 230 V / 4 A, DC rating: 4 A up to 35 VDC and 1 A up to 60 VDC



Digital Multi Control Panel
A convenient and low-cost solution for monitoring and control. With an on/off charger-only switch, full LED readout and a rotary knob to set PowerControl and PowerAssist levels.



VE.Bus Smart Dongle
For monitoring and control via Bluetooth together with the VictronConnect app. It also measures battery voltage and temperature.



Interface MK3-USB
Needed to configure the MultiPlus, Can be used with the VictronConnect app or VE.Configure software. The interface connects to the MultiPlus via an RJ45 UTP cable and plugs into a USB port.



VictronConnect app
Use to monitor or configure the MultiPlus using your phone tablet or PC.



Battery Monitor
To monitor battery state of charge via Bluetooth or the VRM portal.
The BMV 712 Smart has display, while the SmartShunt does not have a display. Both communicate via Bluetooth and have a VE.Direct communication port.

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