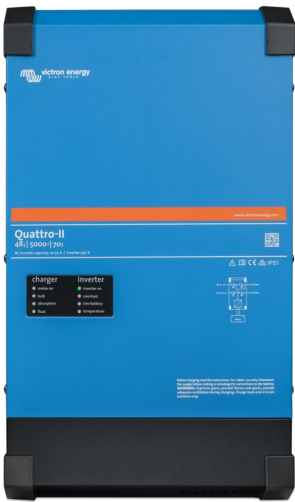# Quattro-II Inverter/Charger

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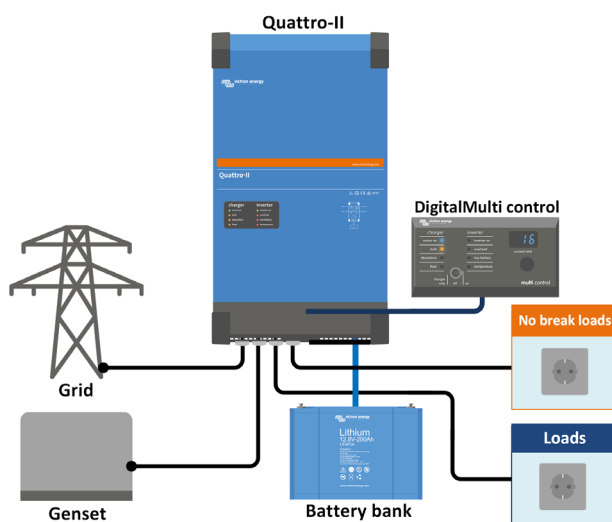
Standard marine, mobile or off-grid application
Loads that should shut down when AC input power is not available can be connected to a second output. These loads will be taken into account by the PowerControl and PowerAssist function in order to limit AC input current to a safe value when AC power is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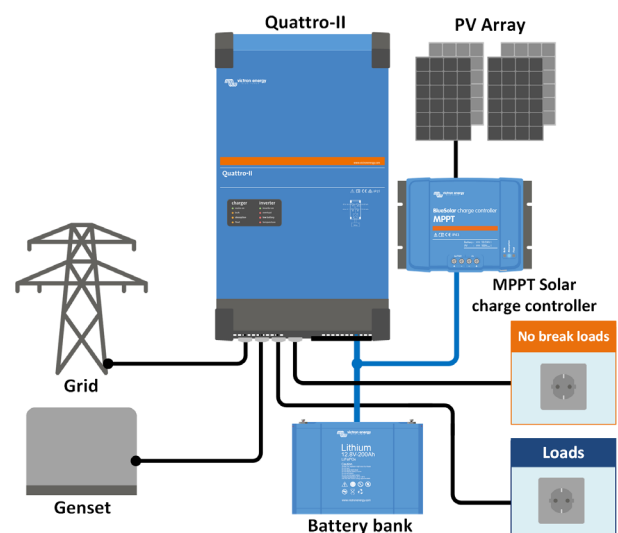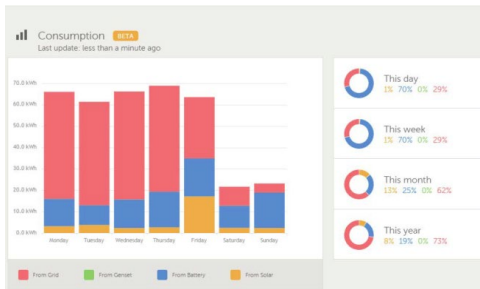

Application with MPPT solar charge controller

GX Touch and Cerbo GX
Provides intuitive system control and monitoring
Besides system monitoring and control the Cerbo GX
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.

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

VE.Bus Smart Dongle
Measures battery voltage and
temperature and allows
monitoring and control with a
smart phone or other
Bluetooth enabled device.

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℃ (3)	5000 VA	
Cont. output power at 25℃	4000 W	
Cont. output power at 40℃	3700 W	
Cont. output power at 65℃	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 (32A) 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℃ (fan assisted cooling)	
Humidity (non-condensing)	max 95%	
ENCLOSURE		
Material & Colour	Steel, blue RAL 5012	
Protection category	IP22	
Battery-connection	M8 bolts	
230 V AC-connection	Screw terminals 13 mm² (6 AWG)	
Weight	30 kg	30 kg
Dimensions (hxwxd)	560 x 328 x 148 mm	560 x 328 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) At 25℃ ambient
5) Programmable relay which can be set for general alarm, DC under voltage or genset start/stop function. AC rating: 230V / 4A, DC rating: 4A up to 35VDC and 1A up to 60VDC

Connection Area Quattro-II 48/5k

Digital Multi Control Panel
A convenient and low-cost solution for remote
monitoring, with a rotary knob to set
PowerControl and PowerAssist levels.