

# Quattro-II 2x120V Inverter/Charger

## 120/240V input and output, or 120V input and output (always 120V output when in inverter mode)

The two AC inputs can be supplied from a split-phase 120/240V source or a single-phase 120V source. When one of the AC sources is available, the Quattro will feed through the AC to its output. The output will therefore mirror the AC input.

The inverter/charger connects to the neutral and the preferred input line (L1). The power needed to charge the batteries will therefore be drawn from L1.

The Quattro switches to inverter operation when no AC source is available. The inverter output is 120V single-phase. In invert mode, the Quattro connects both output lines (L1 and L2) together to provide 120VAC to loads on either line.

Any 240V loads will therefore be supplied only when the Quattro is supplied by a split-phase AC source. This prevents heavy loads such as water heaters or 240V air conditioners from discharging the battery.

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

A maximum grid or generator current can be set. The Quattro 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 will compensate for insufficient generator, shore or grid power with power from the battery. When the load reduces, the spare power is used to recharge the battery (available on L1 input only).

## Two AC inputs and two AC outputs

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

The main output has a no-break functionality. The Quattro takes over the supply to the connected 120V loads in the event of a grid failure or when shore/generator power is disconnected. The transfer time of the L1 output is less than 18 milliseconds so that computers and other electronic equipment will continue to operate without disruption. The transfer time of the L2 output is longer: approximately 40 milliseconds.

The second (auxiliary) output is live only when AC is available on the input of the Quattro. Loads that should not discharge the battery can be connected to this output.

## Virtually unlimited power thanks to parallel and three-phase operation

Up to 6 Quattros can operate in parallel to achieve higher power output.

In addition to parallel connection, three units of the same model can be configured for three-phase output. In multi-phase setups, L2 is disabled on all units.

## On-site system configuring, monitoring and control

Settings can be changed in a matter of minutes with the VictronConnect app or VEConfigure software (computer or laptop and MK3-USB interface needed).

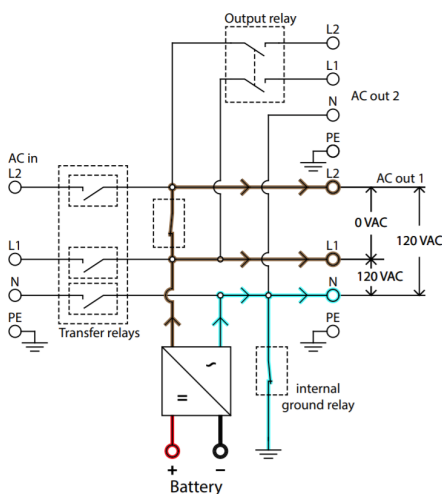
Several monitoring and control options are available: Cerbo GX, Color Control GX, laptop, computer, Bluetooth (with the optional VE.Bus Smart dongle), Battery Monitor, and Digital Multi Control Panel.

## Remote configuring and monitoring

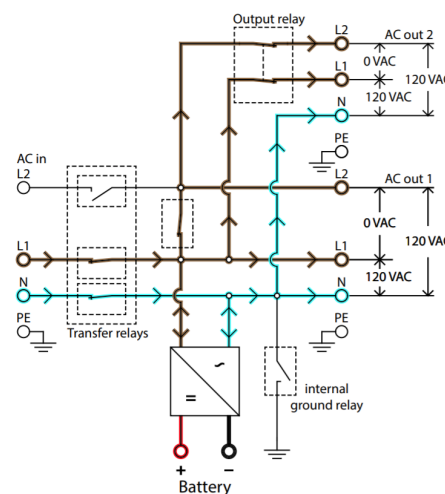
Install a Cerbo GX or other GX product to connect to the internet.

Operational data can be stored and displayed on our VRM (Victron Remote Management) website free of charge.

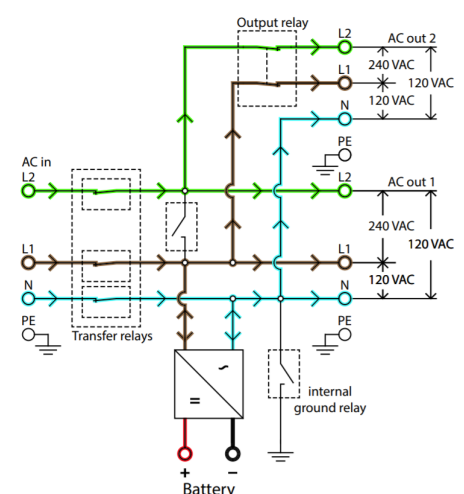
When connected to the internet, systems can be accessed remotely, and settings can be changed.



Power flow: inverter mode



Power flow, 120VAC-input



Power flow, split phase input



### Cerbo GX with GX Touch 50

Provides intuitive system control and monitoring  
 Besides system monitoring and control the Cerbo enables access to our free remote monitoring website: the VRM Online Portal



### VRM Portal

Our free remote monitoring website (VRM) will display all system data in a comprehensive graphical format. System settings can be changed remotely via the portal. Alarms can be received by e-mail.



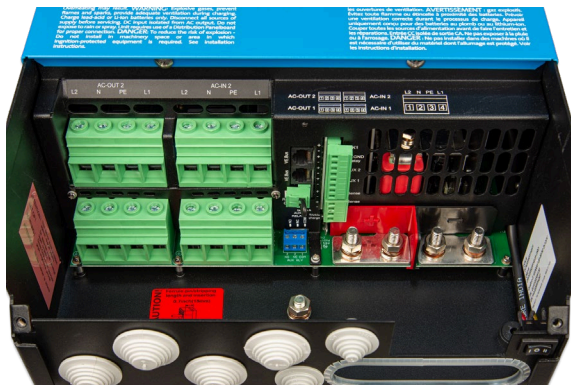
### VRM app

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.



Connection Area

Quattro-II 2x120V	12/3000/120-50 2x120V	24/3000/70-50 2x120V
PowerControl & PowerAssist	Yes (on L1 input)	
Transfer switch	50 A	
Maximum AC input current	50A (each leg)	
<b>INVERTER</b>		
DC Input voltage range	9.5 – 17 V	19-33V
Output when in inverter mode	Output voltage: 120 Vac ± 2% Frequency: 60 Hz ± 0.1% (1)	
Cont. output power at 25°C (3)	3000 VA	
Cont. output power at 25°C	2400 W	
Cont. output power at 40°C	2200 W	
Cont. output power at 65°C	1700 W	
Maximum apparent feed-in power	2500 VA	
Peak power	5500 W	
Maximum efficiency	93%	94%
Zero load power	15W	11W
Zero load power in AES mode	10W	8W
Zero load power in Search mode	4W	4W
<b>CHARGER</b>		
AC Input	Split-phase: 180-280Vac	45 – 65Hz
	Single-phase: 90-140Vac	45 – 65Hz
Charge voltage 'absorption'	14.4 V	28.8 V
Charge voltage 'float'	13.8 V	27.6 V
Storage mode	13.2 V	26.4 V
Maximum battery charge current (4)	120 A	70 A
Battery temperature sensor	Yes	
<b>GENERAL</b>		
Auxiliary output (5)	50 A (each leg)	
External AC current sensor (optional)	100A	
Programmable relay (6)	Yes	
Protection (2)	a – g	
VE.Bus communication port	For parallel and three-phase operation, remote monitoring and system integration	
General purpose com. port (7)	Yes, 2x	
Remote on-off	Yes	
Operating temperature range	-40 to +65°C (-40 -150°F) Fan assisted cooling	
Humidity (non-condensing)	max 95%	
<b>ENCLOSURE</b>		
Material & Colour	Steel, blue RAL 5012	
Protection category	IP22	
Battery-connection	2x2 M8 bolts	2 M8 bolts
120/240 V AC-connection	Screw terminals 21 mm <sup>2</sup> (4 AWG)	
Weight	32.8 kg (52 lb)	22.5 kg (50lb)
Dimensions (hwxwd)	579 x 319 x 168 mm (23 x 13 x 7 inch)	
<b>STANDARDS</b>		
Safety	EN-IEC 60335-1, EN-IEC 60335-2-29 EN 55014-1, EN 55014-2	
Emission, Immunity	EN-IEC 61000-3-2, EN-IEC 61000-3-3 IEC 61000-6-1, IEC 61000-6-2, IEC 61000-6-3	
1) Can be adjusted to 50 Hz.	3) Non-linear load, crest factor 3:1.	
2) Protection key: a) output short circuit b) overload c) battery voltage too high d) battery voltage too low e) temperature too high f) 120Vac on inverter output g) input voltage ripple too high	4) Up to 75°F / 25°C ambient temperature. 5) Switches off when no external AC source is available. 6) Programmable relay that can for example be set for general alarm or DC under voltage or genset start/stop function. - AC rating: 120Vac / 4A - DC rating: 4A up to 35dc, 1A up to 60Vdc 7) Use, for example, to communicate with a lithium battery BMS.	



### Current sensor 100A:50mA

To implement PowerControl and PowerAssist and to optimize self-consumption with external current sensing.  
 Maximum current: 50A resp. 100A.



### Digital Multi Control Panel

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