

Quattro inverter / charger

www.thePowerStore.com

3kVA - 5kVA



Quattro
48/5000/70



Quattro
24/3000/70

Two AC inputs with integrated transfer switch

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

Two AC Outputs

The main output has no-break functionality. The Quattro 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 one of the inputs of the Quattro. Loads that should not discharge the battery, like a water heater for example, can be connected to this output.

Virtually unlimited power thanks to parallel operation

Up to 6 Quattro units can operate in parallel. Six units 24/5000/120, for example, will provide 25kW / 30kVA output power and 720 Amps charging capacity.

Three phase capability

Three units can be configured for three-phase output. But that's not all: up to 6 sets of three units can be parallel connected to provide 75kW / 90kVA inverter power and more than 2000A charging capacity.

PowerControl – Dealing with limited generator, shore-side or grid power

The Quattro is a very powerful battery charger. It will therefore draw a lot of current from the generator or shore side supply (16A per Quattro at 230VAC). A current limit can be set on each AC input. The Quattro will then take account of other AC loads and use whatever is spare for charging, thus preventing the generator or shore supply from being overloaded.

PowerAssist – Boosting shore or generator power

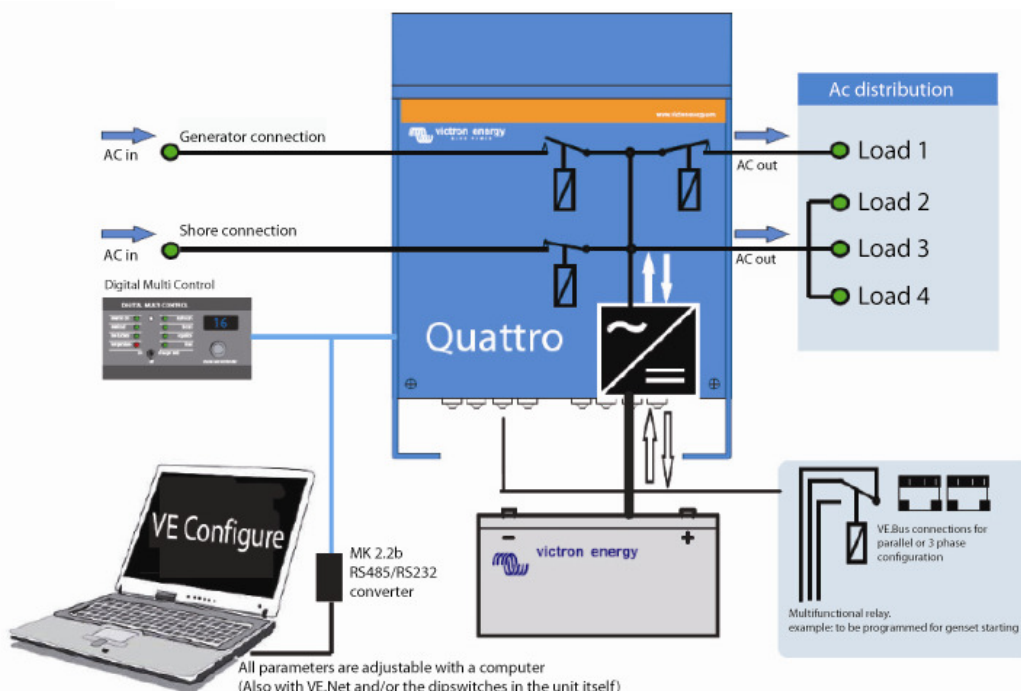
This feature takes the principle of PowerControl to a further dimension allowing the Quattro to supplement the capacity of the alternative source. Where peak power is so often required only for a limited period, the Quattro will make sure that insufficient shore or generator power is immediately compensated for by 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 can be used in off grid as well as grid connected PV and other alternative energy systems.

System configuring has never been easier

After installation, the Quattro is ready to go. If settings have to be changed, this can be done in a matter of minutes with a new DIP switch setting procedure. Even parallel and 3-phase operation can be programmed with DIP switches: no computer needed! Alternatively, VE.Net can be used instead of the DIP switches. And sophisticated software (VE.Bus Quick Configure and VE.Bus System Configurator) is available to configure several new, advanced, features.



Quattro	12/3000/120	24/3000/70	24/5000/120	48/5000/70
PowerControl / PowerAssist	Yes			
Integrated Transfer switch	Yes			
AC inputs (2x)	Input voltage range: 187-265 VAC Input frequency: 45 – 65 Hz Power factor: 1			
Maximum feed through current (A)	50 / 30	50 / 30	50 / 30	50 / 30
INVERTER				
Input voltage range (V DC)	9,5 – 17	19 – 33	19 – 33	38 – 66
Output (1)	Output voltage: 230 VAC ± 2%		Frequency: 50 Hz ± 0,1%	
Cont. output power at 25 °C (VA) (3)	3000	3000	5000	5000
Cont. output power at 25 °C (W)	2500	2500	4500	4500
Cont. output power at 40 °C (W)	2200	2200	4000	4000
Peak power (W)	6000	6000	10.000	10.000
Maximum efficiency (%)	93	94	94	95
Zero-load power (W)	15	15	25	25
Zero load power in AES mode (W)	10	10	20	20
Zero load power in Search mode (W)	4	5	5	6
CHARGER				
Charge voltage 'absorption' (V DC)	14,4	28,8	28,8	57,6
Charge voltage 'float' (V DC)	13,8	27,6	27,6	55,2
Storage mode (V DC)	13,2	26,4	26,4	52,8
Charge current house battery (A) (4)	120	70	120	70
Charge current starter battery (A)	4 (12V and 24V models only)			
Battery temperature sensor	Yes			
GENERAL				
Auxiliary output (A) (5)	25	25	25	25
Programmable relay (6)	Yes			
Protection (2)	a-g			
VE.Bus communication port	For parallel and three phase operation, remote monitoring and system integration			
Common Characteristics	Operating temp.: -20 to +50 °C Humidity (non condensing): max. 95%			
ENCLOSURE				
Common Characteristics	Material & Colour: aluminium (blue RAL 5012) Protection category: IP 21			
Battery-connection	Four M8 bolts (2 plus and 2 minus connections)			
230 V AC-connection	Screw terminals 13 mm ² (6 AWG)			
Weight (kg)	19	19	30	30
Dimensions (h x w x d in mm)	362 x 258 x 218	362 x 258 x 218	444 x 328 x 240	444 x 328 x 240
STANDARDS				
Safety	EN 60335-1, EN 60335-2-29			
Emission, Immunity	EN55014-1, EN 55014-2, EN 61000-3-3			
1) Can be adjusted to 60 HZ; 120 V 60 Hz on request	d) battery voltage too low	4) At 25 °C ambient		
2) Protection key:	e) temperature too high	5) Switches off when no external AC source available		
a) output short circuit	f) 230 VAC on inverter output	6) Programmable relay that can be set for general alarm, DC undervoltage or genset start/stop function		
b) overload	g) input voltage ripple too high	AC rating: 230V/4A		
c) battery voltage too high	3) Non linear load, crest factor 3:1	DC rating: 4A up to 35VDC, 1A up to 60VDC		



Digital Multi Control

This panel is intended both for MultiPlus and Quattro units. Allows PowerControl and PowerAssist current limit setting for two AC sources: a generator and shore-side current for example. Setting range: up to 200 Amps. The brightness of the LEDs is automatically reduced during night time.



Computer controlled operation and monitoring

Several interfaces are available:

- **MK2.2 VE.Bus to RS232 converter**
Connects to the RS232 port of a computer (see 'A guide to VEConfigure')
- **MK2-USB VE.Bus to USB converter**
Connects to a USB port (see 'A guide to VEConfigure')
- **VE.Net to VE.Bus converter**
Interface to VE.Net (see VE.Net documentation)
- **VE.Bus to E-PLEX converter**
Interface to the E-PLEX System. The world's most advanced and field proven digital switching and monitoring system.
- **Victron Global Remote**

The Global Remote is a modem which sends alarms, warnings and system status reports to cellular phones via text messages (SMS). It can also log data from Victron Battery Monitors, Multi's, Quattro's and Inverters to a website through a GPRS connection. Access to this website is free of charge.

BMV-600 Battery Monitor

The BMV-600 Battery Monitor features an advanced microprocessor control system combined with high resolution measuring systems for battery voltage and charge/discharge current. Besides this, the software includes complex calculation algorithms, like Peukert's formula, to exactly determine the state of charge of the battery. The BMV-600 selectively displays battery voltage, current, consumed Ah or time to go. The monitor also stores a host of data regarding performance and use of the battery. Several models available (see battery monitor documentation).