# victron energy

## Multi Inverter/Charger 500VA and 800VA

### 12 / 24 / 48V

www.victronenergy.com

victron energy

#### **Proven reliability**

The full bridge plus toroidal transformer topology has proven its reliability over many years.

The inverter is short circuit proof and protected against overheating, whether due to overload or high ambient temperature.

PowerControl - Dealing with limited generator, shore side or grid power (800VA model only) With the Multi Control Panel a maximum generator or shore current can be set. The MultiPlus will then take account of other AC loads and use whatever is extra for charging, thus preventing the generator or shore supply from being overloaded.

#### PowerAssist - Boosting the capacity of shore or generator power (800VA model only)

Where peak power is so often required only for a limited period, the MultiPlus 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.

#### High start-up power

Needed to start high inrush loads such as power converters for LED lamps, halogen lamps or electric tools.

#### Search Mode

When Search Mode is 'on', the power consumption of the inverter in no-load operation is decreased by approx. 70%. In this mode the Multi, when operating in inverter mode, is switched off in case of no load or very low load, and switches on every two seconds for a short period. If the output current exceeds a set level, the inverter will continue to operate. If not, the inverter will shut down again.

#### **Programmable relay**

By default, the programmable relay is set as an alarm relay, i.e. the relay will de-energise in the event of an alarm or a pre-alarm (inverter almost too hot, ripple on the input almost too high, battery voltage almost too low).

#### Remote on / off / charger on

Remote operation can be implemented by connecting a switch to the three pole connector.

F

Ir С С С С С Ρ ٨ Ζ Ζ A С С S С С В Ρ

С

C B 2 W D S S E R

> 1) 2) a. b. c. d. e. f.

g. Input voltage ripple too high





12 Volt 24 Volt	Multi 12/500/20 Multi 24/500/10	MultiPlus 12/800/35 MultiPlus 24/800/16	
48 Volt	Multi 24/500/10 Multi 48/500/6	MultiPlus 48/800/9	
PowerControl / PowerAssist	No	Yes	
Transfer switch	16		
	INVERTER		
Input voltage range	9,5 – 17V 19 –	33V 38-66V	
Output	Output voltage: 230VAC ± 2%	Frequency: 50Hz ± 0,1% (1)	
Cont. output power at 25°C (3)	500VA	800VA	
Cont. output power at 25°C	430W	700W	
Cont. output power at 40°C	400W	650W	
Cont. output power at 65°C	300W	400W	
Peak power	900W	1600W	
Maximum efficiency	90 / 91 / 92%	92 / 93 / 94%	
Zero-load power	6/6/7W	7 / 7 / 8W	
Zero-load power in search mode	2/2/3W	2/2/3W	
	CHARGER		
AC Input	Input voltage range: 187-265 VAC	Input frequency: 45 – 65 Hz	
Charge voltage 'absorption'	14,4 / 28,8 / 57,6V		
Charge voltage 'float'	13,8 / 27,6 / 55,2V		
Storage mode	13,2 / 26,4 /52,8V		
Charge current house battery (4)	20 / 10 / 6A	35 / 16 / 9A	
Charge current starter battery	1 A (6) (12V and 24V models only)		
Battery temperature sensor	Yes		
	GENERAL		
Programmable relay (5)	Ye	25	
Protection (2)	a – g		
Common Characteristics	Operating temp. range: -40 to +65°C (fan assisted cooling)		
	Humidity (non-con	densing): max 95%	
Common Characteristics	ENCLOSURE	L EQ12) Protection estanomy ID 23	
Common Characteristics Battery-connection	Material & Colour: Steel/ABS (blue RA 16 / 10 / 10 mm <sup>2</sup>	L 5012) Protection category: IP 21 25 / 16 / 10 mm <sup>2</sup>	
230V AC-connection	G-ST18i c		
Weight	4,4 kg	6,4 kg	
Dimensions (h x w x d)	4,4 kg 311 x 182 x 100 mm	375 x 240 x 100 mm	
	STANDARDS	575 240 2 100 1111	
Safety		60335-2-29 EN 62109-1	
	EN-IEC 60335-1, EN-IEC 60335-2-29, EN 62109-1 EN 55014-1, EN 55014-2, EN-IEC 61000-3-2, EN-IEC 61000-3-3		
Emission / Immunity	IEC 61000-6-1, IEC 61000-6-2, IEC 61000-6-3		
Road vehicles	ECE R10-4		
1) Can be adjusted to 60Hz and to 240V 2) Protection	3) Non-linear load, crest factor 3:1 4) At 25°C ambient		
a. Output short circuit	5) Programmable relay which can be s	<ul><li>4) At 25°C ambient</li><li>5) Programmable relay which can be set for:</li></ul>	
b. Overload	General alarm	General alarm	
c. Battery voltage too high d. Battery voltage too low	DC under voltage or generator start/stop signal function AC rating: 230V/4A		
e. Temperature too high		DC rating: 4A up to 35VDC, 1A up to 60VDC	
. 230VAC on inverter output	6) 12V and 24V model		

