

# MultiPlus-II 8k, 10k and 15k Inverter/chargers (Australia)

48/8000/110-100 230V, 48/10000/140-100 230V and 48/15000/200-100 230V



**MultiPlus-II**

## The MultiPlus-II and ESS (Energy Storage System) functionality

The MultiPlus-II is a multifunctional inverter/charger with all the features of the MultiPlus, plus an external current sensor option which extends the PowerControl and PowerAssist function to 100A.

The MultiPlus-II is ideally suited for professional marine, yachting, vehicle and land based off-grid applications. It also has built-in anti-islanding functionality, and an increasingly long list of country approvals for ESS application. Several system configurations are possible. For more detailed information see the ESS Design and configuration manual.

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

A maximum grid or generator current can be set. The MultiPlus-II will then take account of other AC loads and use whatever is extra for battery charging, thus preventing the generator 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 MultiPlus-II will compensate for insufficient generator power with power from the battery. When the load reduces, the spare power is used to recharge the battery.

## Solar energy: AC power is available even during a grid failure

The MultiPlus-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 AC output features no-break functionality. Upon grid disconnection the MultiPlus-II takes over the load supply in under 20ms, ensuring uninterrupted operation of computers and electronics.

The second AC output is active only when grid power is available on the AC input. Use this to connect non-critical loads that should not deplete battery, e.g., water heater or air conditioner.

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

Three units of the same model can be configured for three-phase output.

## 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) or via the VRM portal.

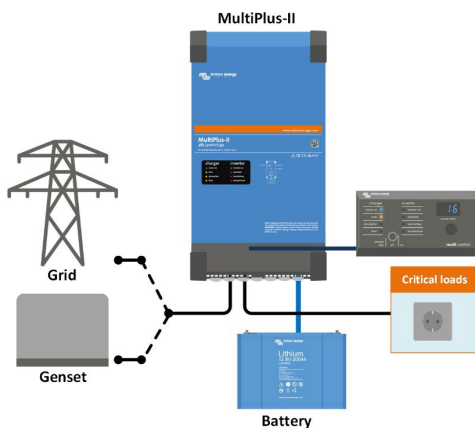
Use the MultiPlus-II GX or add a Cerbo GX, Ekrano GX or Color Control GX to a MultiPlus-II for local or remote connectivity.

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.

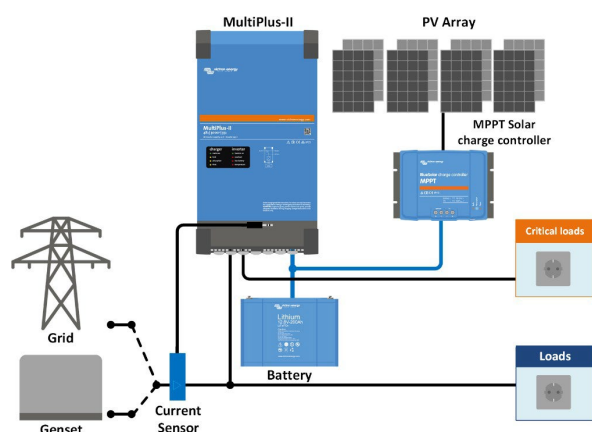
Other monitoring and control options are available as well, like the VictronConnect app together with a VE.Bus Smart dongle, a Battery Monitor or the Digital Multi Control Panel.



**MultiPlus-II GX**



**Standard application**

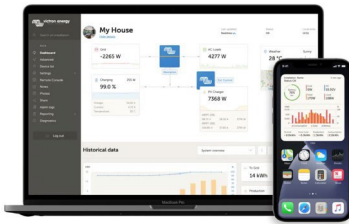


**Grid parallel topology with MPPT solar charge controller**



### Ekrano GX or Cerbo GX

Provides intuitive system control and monitoring and enables access to our free remote monitoring website: the VRM Online Portal. Note: not required the MultiPlus-II GX unit, as these have an in-built GX device.



### 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 or push notification.



### VRM app

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



### Current Transformer

To implement PowerControl and PowerAssist and to optimize self-consumption with external current sensing. Maximum current: 100 or 400A



### 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.

MultiPlus-II	48/8000/110-100 230V	48/10000/140-100 230V	48/15000/200-100 230V
PowerControl & PowerAssist	Yes		
Transfer switch	100 A		
Maximum AC input current	100 A		
<b>INVERTER</b>			
DC Input voltage range	38 – 66 V		
AC Output voltage	230 V ± 2%		
AC output frequency	50 Hz ± 0,1% <sup>(1)</sup>		
AC output current	29 A	36 A	54 A
Cont. output power at 25°C <sup>(3)</sup>	8000 VA	10000 VA	15000 VA
Cont. output power at 25°C	6400 W	8000 W	12000 W
Cont. output power at 40°C	5500 W	7000 W	10000 W
Cont. output power at 65°C	4000 W	6000 W	7000 W
Peak power	15000 W	18000 W	27000 W
Maximum output fault current	80 A	100 A	150 A
Maximum output overcurrent protection AC out 1	135 A	143 A	165 A
Maximum output overcurrent protection AC out 2	50A		
Overvoltage category for all ports	OVC III		
Active anti-islanding method	Frequency Shift method		
Maximum battery discharge current	188 A	235 A	350 A
Maximum efficiency	95%		
Zero load power	29 W	38 W	55 W
Zero load power in AES mode	19 W	27 W	39 W
Zero load power in Search mode	3 W	4 W	6 W
Inverter topology	Isolated		
<b>CHARGER</b>			
AC Input voltage range	230V ± 10%		
AC Input frequency range	45 – 65 Hz		
Maximum AC Input current while charging	27A	32A	48A
Charge voltages	Absorption: 57.6 V, Float: 55.2V, Storage: 52.8V		
Max. battery charge current <sup>(4)</sup>	110 A	140 A	200 A
Battery temperature sensor	Optional. Order number: ASS000001000		
Compatible battery chemistries	Lead-acid, Lithium and others <sup>(5)</sup>		
<b>GENERAL</b>			
Auxiliary AC output	Yes (50A)		
AC output-1 current with Power assist	129 A	136 A	154 A
AC output-2 current with Power assist	50 A		
External AC current sensor (optional)	100 A		
Programmable relay <sup>(6)</sup>	Yes		
Protection <sup>(2)</sup>	a-g		
VE.Bus communication port	Yes		
General-purpose communication port	Yes, 2x		
Remote on/off terminal	Yes		
Operating temperature range	-20 to +65°C (fan-assisted cooling)		
Rated short-time withstand current	6 kA (lcw)		
Environmental category	Indoor conditional		
Pollution degree	2		
Humidity (non-condensing)	max 95%		
Maximum altitude	2000m		
Country of manufacture	India		
<b>ENCLOSURE</b>			
Material & Colour	Steel, blue RAL 5012		
Protection category	IP21		
Battery-connection	M8 bolts		
AC connections	Screw terminals for wire up to 13mm <sup>2</sup> (6 AWG)		
Weight	42 kg	49 kg	80 kg
Dimensions hwxwd (mm)	642 x 363 x 206	677 x 363 x 206	810 x 405 x 217
<b>STANDARDS</b>			
Safety	EN-IEC 60335-1, EN-IEC 60335-2-29, EN-IEC 62109-1, EN-IEC 62109-2 AS IEC 62477.1:2022, AS/NZS 4777.2: 2020+A1+A2		
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		
1) Can be adjusted to 60Hz	3) Non-linear load, crest factor 3:1		
2) Protection key:	4) Up to 25°C ambient		
a) output short circuit	5) Other chemistries are possible as well, providing the charger is configured confirm the battery manufacturer's specifications.		
b) overload	6) 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		
c) battery voltage too high			
d) battery voltage too low			
e) temperature too high			
f) 230Vac on inverter output			
g) input voltage ripple too high			