

MULTIPLUS-II

INVERTER/CHARGER

3000VA ~ 15000VA



MultiPlus-II Inverter/Charger



hmteltec.com

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The MultiPlus-II inverter/charger is a versatile device that serves two main functions. It acts as an inverter, converting stored battery power (DC) into usable electricity for household devices (AC). Additionally, it can function as a charger, replenishing the battery bank by converting external AC power to DC for storage. The MultiPlus-II is ideally suited for load shedding and recreational solutions.

PowerControl and PowerAssist Boosting the Capacity

With PowerControl, you can set a maximum limit for AC power drawn from an external source, prioritizing critical loads and preventing overloading. PowerAssist allows the inverter to supplement inadequate AC power from the grid or generator by intelligently drawing from the battery bank, ensuring a stable power supply during peak demand or low-capacity situations. These features optimize energy usage, making the MultiPlus-II an efficient solution for off-grid and hybrid power systems.

Solar Energy: AC Power 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 charger controllers and grid-tie inverters.

Two AC Outputs

The main output supplies AC power from the battery bank to run household loads, functioning as the primary power source. Meanwhile, the auxiliary output, when configured, provides limited power to non-essential loads, allowing you to prioritize critical loads during high-demand situations or power shortages. This dual-output design offers flexibility in power distribution and efficient management of electricity in various scenarios.

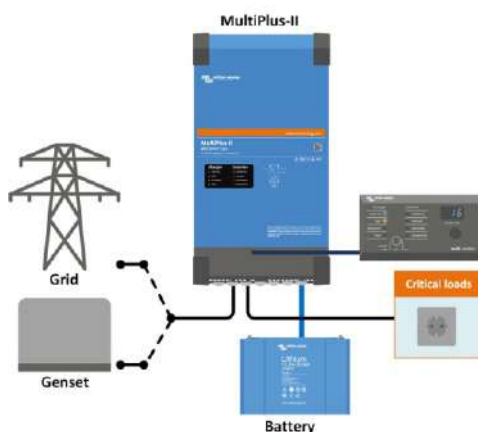
On-site System Configuring, Monitoring and Control

Settings can be changed in a matter of minutes on the free Victron Portal (VRM) with 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, Digital Multi Control Panel.

Remote configuring and monitoring

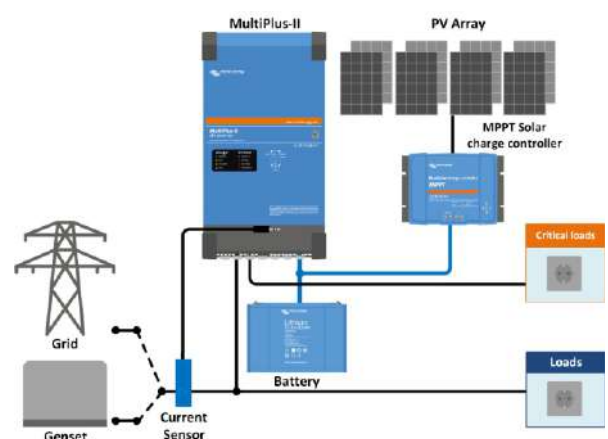
Install a Cerbo GX or other GX product to connect to the internet.

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 and off-grid application

Loads that should shutdown when AC input power is not available can be connected to a second output (not shown). These loads will be taken into account by the PowerControl and PowerAssist function in order to limit AC input current to safe value when AC power is available.



Grid parallel topology with MPPT solar charge controller

The Multiplus-II will use data from the external AC current sensor (must be ordered separately) or power meter to optimize self-consumption and, if required, to prevent gridfeed. In case of a power outage, the Multiplus-II will continue to supply the critical loads.



Ekrano GX



Cerbo GX



GX Touch (optional display for Cerbo GX and Cerbo-S GX)

Ekrano GX

The Ekrano GX represents the next generation in the GX product family. It is a combination of the Cerbo GX and the GX Touch. With its complete range of connections and interfaces as well as a built-in 7-inch touchscreen display, it is the most powerful GX device to date and allows you to always have perfect control over your system from wherever you are and to maximise its performance.

Cerbo GX: communication-centre

This communication-centre allows you to always have perfect control over your system from wherever you are and to maximise its performance. Simply access your system via our Victron Remote Management (VRM) portal, or access it directly, using the optional GX Touch screen, a Multi-Functional Display (MFD) or our VictronConnect app thanks to its Bluetooth capability.

GX Touch: display accessory

The GX Touch 50 and GX Touch 70 are display accessories for the Cerbo GX. The five inch touch screen display gives an instant overview of your system and allows you to adjust settings. Simply connect the display to the Cerbo GX with just one cable. Both GX Touch displays have a waterproof design, a top-mountable setup and is simple to install.

Remote Console on VRM

Monitor, control and configure the Cerbo GX remotely, over the internet. Just like if you were standing in front of the device, using Remote Console. The same functionality is also available on the local network LAN, or using the WiFi Access Point of the Cerbo GX.

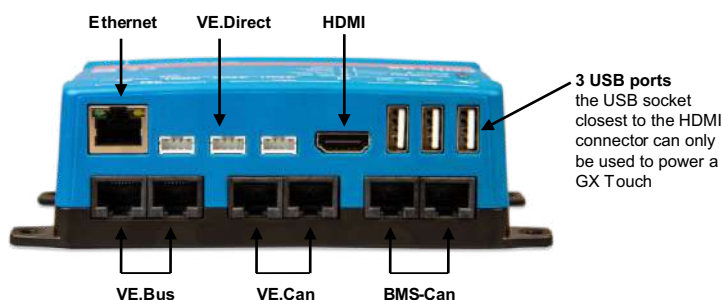
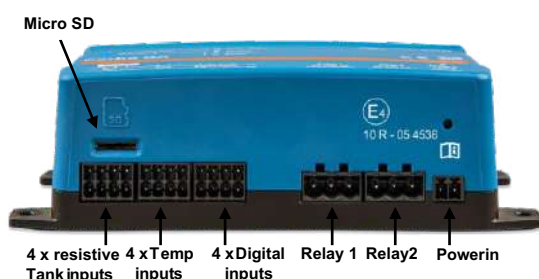
Perfect monitoring & control

Instantly monitor the battery state of charge, power consumption, power harvest from PV, generator, and mains, or check tank levels and temperature measurements. Easily control the power input current limit, (auto)start/stop generator(s) or change any setting to optimise the system. Follow up on alerts, perform diagnostic checks and resolve complications remotely.



VRM Portal

A free remote monitoring website (VRM) will display all your system data. System settings can be changed remotely via the portal.



MultiPlus-II 230V	12/3000/120-32* 24/3000/70-32 48/3000/35-32	24/5000/120-50* 48/5000/70-50	48/8000/ 110-100	48/10000/ 140-100	48/15000/ 200-100
PowerControl & PowerAssist	Yes				
Transfer switch	32 A	50 A	100 A	100 A	100 A
Maximum AC input current	32 A	50 A	100 A	100 A	100 A
INVERTER					
DC Input voltage range	12V - 9,5-17 V		24V - 19-33V	48V – 38-66 V	
Output	Output voltage: 230 VAC ± 2% Frequency: 50 Hz ± 0,1% (1)				
Cont. output power at 25°C (3)	3000 VA	5000 VA	8000 VA	10000 VA	15000 VA
Cont. output power at 25°C	2400 W	4000 W	6400 W	8000 W	12000 W
Cont. output power at 40°C	2200 W	3700 W	5500 W	7000 W	10000 W
Cont. output power at 65°C	1700 W	3000 W	4000 W	6000 W	7000 W
Max apparent feed-in power	3000 VA	5000 VA	8000 VA	10000 VA	15000 VA
Peak power	5500 W	9000 W	15000 W	18000 W	27000 W
Maximum efficiency	93%/94%/95%	96%	95%	96%	95%
Zero load power	13 / 13 / 11 W	18 W	29 W	38 W	55 W
Zero load power in AES mode	9 / 9 / 7 W	12 W	19 W	27 W	39 W
Zero load power in Search mode	3 / 3 / 2 W	2 W	3 W	4 W	6 W
CHARGER					
AC Input	Input voltage range: 187-265 VAC Input frequency: 45 – 65 Hz				
Charge voltage 'absorption'	14,4 / 28,8 / 57,6 V				
Charge voltage 'float'	13,8 / 27,6 / 55,2 V				
Storage mode	13,2 / 26,4 / 52,8 V				
Max. battery charge current (4)	120 /70 / 35 A	120 / 70 A	110 A	140 A	200 A
Battery temperature sensor	Yes				
GENERAL					
Auxiliary output	Yes (32A)		Yes (50A)		
External AC current sensor (optional)	50A or 100A				
Programmable relay (5)	Yes				
Protection (2)	a – g				
VE.Bus communication port	For parallel (not for 8k and 10k models) 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°C (fan assisted cooling)				
Humidity (non-condensing)	max 95%				
ENCLOSURE					
Material & Colour	Steel, blue RAL 5012				
Protection category	IP22				
Battery-connection	M8 bolts		Four M8 bolts (2 plus and 2 minus connections)		
230 V AC-connection	Screw terminals 13 mm² (6 AWG)		Bolts M6	Bolts M6	Bolts M6
Weight	19 kg	30 kg	42 kg	49 kg	80 kg
Dimensions (hwxwd) mm	546 x 275 x 147 499 x 268 x 141 499 x 268 x 141	607 x 330 x 149 565 x 320 x 149	642 x 363 x 206	677 x 363 x 206	810 x 405 x 217
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	3) Non-linear load, crest factor 3:1				
2) Protection key:	4) Up to 25°C ambient				
a) output short circuit	5) Programmable relay which can be set for general alarm, DC under voltage or genset				
b) overload	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) 230 VAC on inverter output					
g) input voltage ripple too high					

*Awaiting approval of NRS097 Certification