

# MULTIPLUS II

The MultiPlus-II combines the functions of the MultiPlus and the MultiGrid, including all the features of the MultiPlus, plus an external current sensor (option) which extends the PowerControl and PowerAssist function to 100A.



Bornay Victron Energy Multiplus II



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Multiplus II - GX



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### A MultiPlus, plus ESS (Energy Storage System) functionality

The MultiPlus-II combines the functions of the Phoenix MultiPlus and the MultiGrid.

It has all the features of the MultiPlus, plus an external current sensor option which extends the PowerControl and PowerAssist function to 100 A.

It also has all the features of the MultiGrid with built-in anti-islanding and an increasingly long list of country approvals.

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

A maximum generator or grid current can be set. The Multi 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 Multi will compensate insufficient generator, shore or grid power with power from the battery. When the load reduces, the spare power is used to recharge the battery.

### ESS: Energy Storage Systems

The MultiPlus can be used in off grid as well as grid connected PV and other alternative energy systems.

Several system configurations are possible, for more detailed information see the ESS Design and configuration manual.

### On-site monitoring and control

Several options are available: Battery Monitor, Digital Multi Control Panel, Color Control Panel, Bluetooth (Cerbo, Venus GX or Color Control panel needed), laptop or computer.

### Remote configuring and monitoring

Install a Venus GX or a Color Control Panel to connect to the internet.

Data can be stored and displayed on our VRM (Victron Remote Management) website, free of charge. When connected to the Ethernet, systems can be accessed remotely and settings can be changed.

### \* MULTIPLUS II - GX

MultiPlus-II GX communicates with a solar charger, batteries, and other devices to control a grid-connected, off-grid, or remote power installation.

## SPECIFICATIONS

Multiplus II	24/3000/70-32	48/3000/35-32	48/5000/70-50
<b>Electrical Specifications</b>			
PowerControl & PowerAssist		Yes	
Transfer Switch		32 A.	50 A
Maximum AC input current		32 A.	50 a
<b>Inverter</b>			
DC Input voltage range	19 - 33 V		38 - 66 V
Voltage output		230 Vac ± 2%	
Frequency		50 Hz ± 0.1 % <sup>(1)</sup>	
Cont. output power at 25 °C <sup>(3)</sup>	3000 VA	3000 VA	5000 VA
Cont. output power at 25 °C	2400 W	2400 W	4000 W
Cont. output power at 40 °C	2200 W	2200 W	3700 W
Cont. output power at 65 °C	1700 W	1700 W	3000 W

Peak power	5500 W	5500 W	9000 W
Maximum efficiency	94 %	95 %	96 %
Zero load power	13 W	11 W	18 W
Zero load power in AES mode	9 W	7 W	12 W
Zero load power in Search mode	3 W	2 W	2 W
<b>Charger</b>			
Input Voltage	187 - 265 Vac		
Input frequency	45 - 65 Hz		
Charge voltage 'absorption'	28,8 V	57,6 V	
Charge voltage 'float'	27,6 V	55,2 V	
Storage mode	26,4 V	52,8 V	
Maximum battery charge current <sup>(4)</sup>	70 A	35 A	70 A
Battery temperature and voltage sensor	Yes		
<b>General</b>			
Auxiliary output	Yes, 32 A.		
Programmable relay <sup>(5)</sup>	Yes		
Protection <sup>(2)</sup>	a - g		
VE.Bus communication port	For parallel and three phase operation, remote monitoring and system integration		
General purpose com. port	Yes, 2 ports		
Remote On / Off	Yes		
Operating temperature range	-40 a + 65 °C (fan assisted cooling)		
Humidity	max. 95 % (non condensing)		
<b>Enclosure</b>			
Material & Colour	Steel, blue RAL 5012		
Protection category	IP22		
Battery-connection	M8 Bolts		
230 Vac connection	Screw terminals 13 mm <sup>2</sup> (6 AWG)		
Weight	18 Kg		29 Kg
Dimensions ( h x w x d )	506 x 275 x 147		565 x 323 x 148
<b>Standards</b>			
Security	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 suply	IEC 62040-1, AS 620401.1		
Anti-islanding	VDE-AR-N 4105, TOR-D4, AS/NZS 4777.2, NRS 097-2-1, UTE C15-712-1, C10/11, RD 1699-RD 413, G59/3-2, G83/2		

1) Can be adjusted to 60 Hz

2) Protection Key:

- a) output short circuit
- b) overload
- 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

3) Non-linear load, crest factor 3:1

4) At 25 °C ambient

5) Programmable relay which can be set for general alarm, DC undervoltage or genset start / stop function. AC rating :230V / 4A, DC rating: 4A up to 35 Vdc and 1 A up to 60 Vdc.

## DOWNLOADS

CATÁLOGO GENERAL 2020

 [Catalogo-Bornay-0520.pdf](#)

Size: 21.51 MiB