

EasySolar-II 3kVA MPPT 250/70 GX, 5kVA MPPT 250/100 GX

The all-in-one solar power solution

www.victronenergy.com



EasySolar-II GX 3 kVA



VRM app for Wi-Fi

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



VRM Portal

Our free remote monitoring website (VRM) will display all your system data in a comprehensive graphical format. System settings can be changed remotely via the portal. Alarms can be received by e-mail.

The all-in-one solar power solution

The Victron EasySolar-II GX integrates the following elements:

- A MultiPlus-II inverter/charger
- A SmartSolar MPPT -Tr solar charge controller
- A GX device with a 2 x 16-character display.

These elements come prewired together inside a single unit. This greatly simplifies most installations, saving time and money.

Display and Wi-Fi

The display reads battery, inverter and solar charge controller parameters.

The same parameters can be accessed with a smartphone or other Wi-Fi enabled device.

In addition, Wi-Fi can be used to set up the system and to change settings.

Solar charge controller

The DC output of the SmartSolar MPPT is parallel wired with the DC connection of the MultiPlus-II inverter/charger.

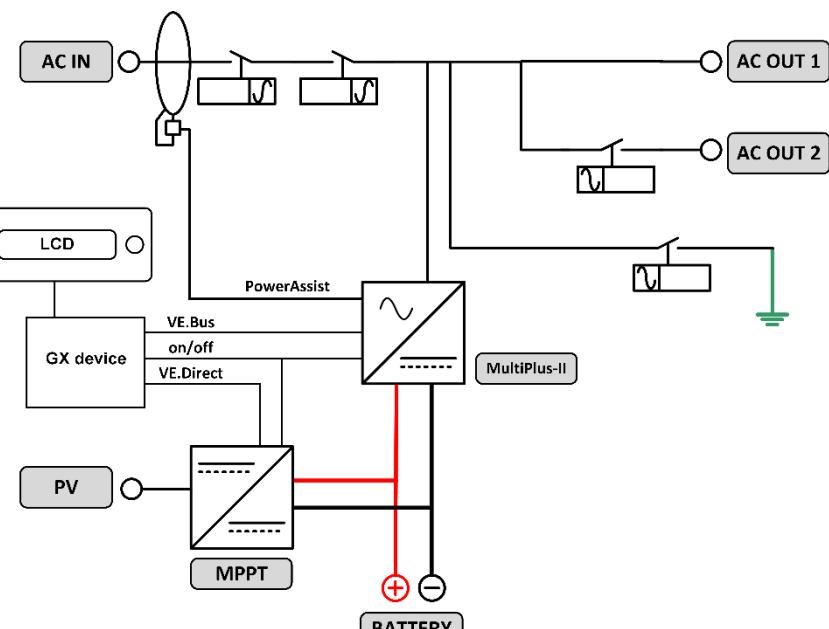
The on/off mechanism of the MultiPlus-II also controls the SmartSolar MPPT.

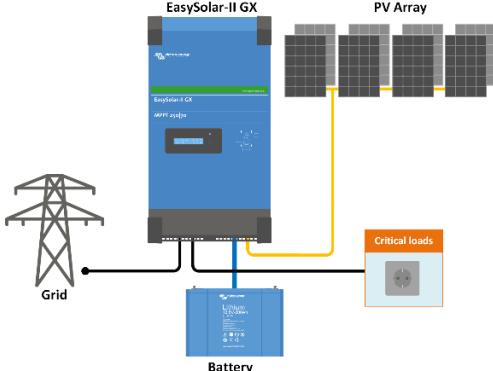
GX device

The integrated GX device includes:

- A BMS-Can interface. This can be used to connect to a compatible CAN-bus managed battery. Note that this not a VE.Can compatible port.
- A USB port
- An Ethernet port
- A VE.Direct port

The GX device controls the MultiPlus-II and the SmartSolar MPPT with respectively a VE.Bus and a VE.Direct connection.

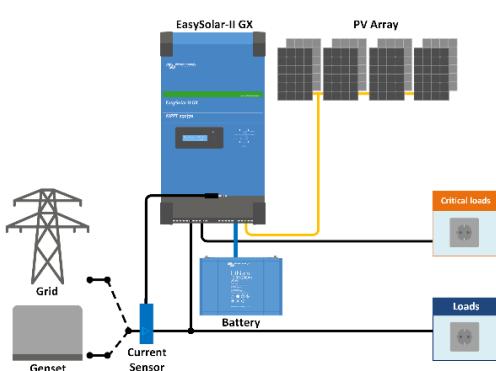




Grid in-line topology

The EasySolar-II GX will use excess PV power to charge the batteries or to feed power back into the grid and will discharge the battery or use power from the grid to supplement a shortage of PV power. In case of a power outage, the EasySolar-II GX will disconnect the grid and continue to supply the loads.

Loads that should shut down 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 a safe value.



Grid parallel topology

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



Current sensor 100A:50mA

To implement PowerControl and PowerAssist and to optimise self-consumption with external current sensing.

Maximum current: 50 A resp. 100 A.
Length of connection cable: 1 m.



Connection area

EasySolar-II	24/3000/70-32 MPPT 250/70 GX	48/3000/35-32 MPPT 250/70 GX	48/5000/70-50 MPPT 250/100 GX
INVERTER/CHARGER			
PowerControl & PowerAssist		Yes	
Transfer switch	32 A	50 A	
Maximum AC input current	32 A	50 A	
Auxiliary output	32 A	50 A	
INVERTER			
Input voltage range	19 – 33 V	38 – 66 V	38 – 66 V
Output		Output voltage: 230 VAC ± 2 % Frequency: 50 Hz ± 0,1 % (1)	
Cont. output power at 25 °C (3)	3000 VA / 2400 W	3000 VA / 2400 W	5000 VA / 4000 W
Cont. output power at 40 °C / 55 °C	2200 W / 1700 W	2200 W / 1700 W	3700 W / 3000 W
Maximum apparent feed-in power	2470W / 3000 VA	2470W / 3000 VA	4400 W / 5000 VA
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
CHARGER			
AC Input		Input voltage range: 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	70 A	35 A	70 A
Battery temperature sensor		Yes	
Programmable relay (5)		Yes	
Protection (2)		a - g	
VE.Bus communication port		For parallel and three phase operation, remote monitoring and system integration	
General purpose com. port		Yes, 2x	
SMARTSOLAR CHARGE CONTROLLER			
Model		MPPT 250/70-Tr	MPPT 250/100-Tr
Maximum output current		70 A	100 A
Maximum PV power	2000 W	4000 W	5800 W
Maximum PV open circuit voltage		250 V	
Maximum efficiency		99%	
Self-consumption		20 mA	
Charge voltage 'absorption', default		57,6 V	
Charge voltage 'float', default		55,2 V	
Protection (2)		a – e	
GENERAL			
Interfaces		BMS-Can, USB, Ethernet, VE.Direct, Wi-Fi	
Remote on-off		Yes	
Operating temp. range		-20 to +45 °C (fan assisted cooling) Max. altitude 2000 m	
Humidity (non-condensing):		max 95 %	
ENCLOSURE			
Material & Colour		aluminium (blue RAL 5012)	
Protection category		IP21	
Battery-connection		M8 bolts	
PV connection		M6 bolts	
230 VAC-connection		Screw terminals 16 mm ² (6 AWG)	
Weight	26 kg	26 kg	38.6 kg
Dimensions (h x w x d) mm		499 x 268 x 237	604 x 323 x 253
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	
Anti-islanding		See our website	
1) Can be adjusted to 60 Hz		3) Non-linear load, crest factor 3:1	
2) Protection key:		4) At 25 °C ambient	
a) output short circuit		5) Programmable relay which can be set for general alarm, DC under voltage or genset start/stop function.	
b) overload		AC rating: 230 V / 4 A, DC rating: 4 A up to 35 VDC and 1 A up to 60 VDC	
c) battery voltage too high		e) temperature too high	
d) battery voltage too low		f) 230 VAC on inverter output	
e) temperature too high		g) input voltage ripple too high	