

EasySolar-II 48V 4k5 & 6k5 GX

The all-in-one solar power solution

www.victronenergy.com



EasySolar-II GX 48V 6k5W



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.

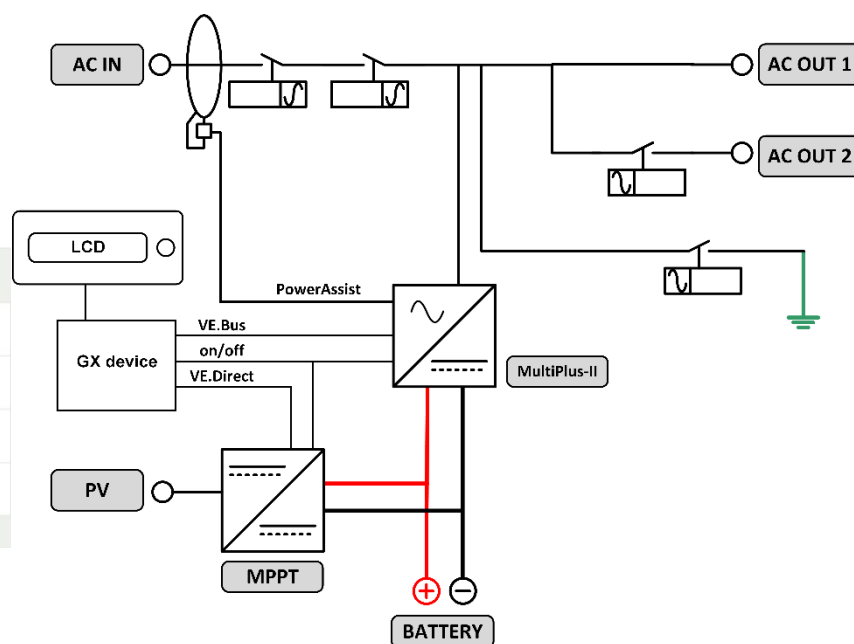
The on/off mechanism of the MultiPlus-II also controls the SmartSolar MPPT.

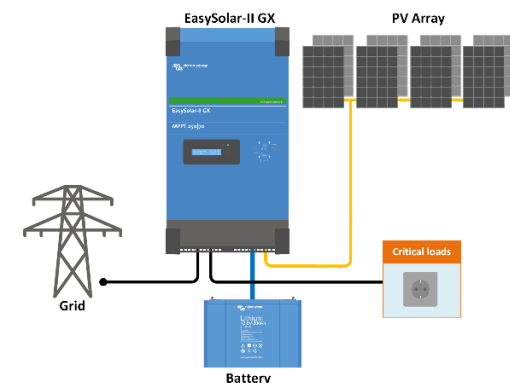
GX device

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.

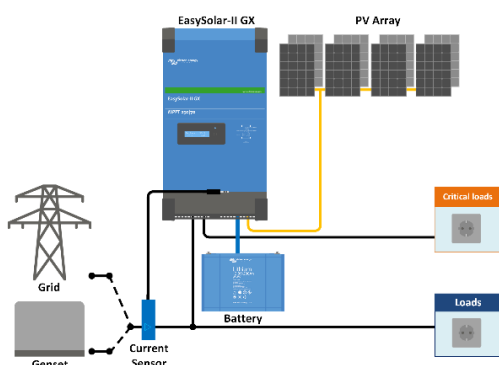




Grid in-line topology

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: 100 A.

Length of connection cable: 1 m.



Connection area

EasySolar-II	48/4k5/55-32 MPPT 250/70 GX	48/6k5/100-50 MPPT 250/100 GX
PowerControl & PowerAssist	Yes	
Transfer switch	32 A	50 A
Maximum AC input current	32 A	50 A
INVERTER		
Input voltage range	38 – 60 V	
Output	Output voltage: 230 VAC ± 2 % Frequency: 50 Hz ± 0,1 % (1)	
Cont. output power at 25 °C	4 kW	6 kW
Cont. output power at 40 °C / 55 °C	3,7 kW	5,7 kW
Cont. output power at 65 °C	3 kW	4.6 kW
Time-limited power 1 (cold start)	4,5 kW/2h	6,5 kW/3h
Time-limited power 2 (cold start)	6 kW/25min	8 kW/1h
Maximum apparent feed-in power	4 kW	6 kW
Peak power	7 kW/1min	11 kW/1min
Maximum efficiency	95 %	96 %
Zero load power	20 W	25 W
Zero load power in AES mode	12 W	14 W
Zero load power in Search mode	7 W	7 W
CHARGER		
AC Input	Input voltage range: 187-265 VAC Input frequency: 45 – 65 Hz	
Charge voltage 'absorption'	57,6 V	
Charge voltage 'float'	55,2 V	
Storage mode	52,8 V	
Max. battery charge current at 25 °C	55 A	100 A
Max. battery charge current at 40 °C	50 A	95 A
Battery temperature sensor	Optional. Order number: ASS000001000	
Compatible battery chemistries	Lithium, Lead-acid, Zinc-Bromine and more (3)	
SMARTSOLAR CHARGE CONTROLLER		
Maximum output current	70 A	100 A
Maximum PV power	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 setting	55,2 V	
GENERAL		
Auxiliary output	Yes (32 A)	
External AC current sensor (optional)	100 A	
Programmable relay (4)	Yes	
Protection (2)	a – e	
Interfaces	BMS-Can, USB, Ethernet, VE.Direct, Wi-Fi	
General purpose com. port	Yes, 2x	
Remote on-off	Yes	
Operating temp. range	-20 to +65 °C (fan assisted cooling)	
Humidity (non-condensing)	max 95 %	
Maximum altitude	2000 m.	
ENCLOSURE		
Material & Colour	Steel, 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 kg	27	40
Dimensions (h x w x d) mm	591 x 275 x 254	670 x 320 x 270
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 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) Other chemistries are possible as well, providing the charger is configured according to the battery manufacturer's specification. 4) Programmable relay which can be set for general alarm, DC under voltage or genset start/stop function. AC rating: 230 V / 4 A, DC rating: 4 A up to 35 VDC and 1 A up to 60 VDC	