EasySolar-II GX 3 kVA

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 wifi

The display reads battery, inverter and solar charge controller parameters.
The same parameters can be accessed with a smartphone or other wifi enabled device.
In addition, wifi 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 VE.Can interface. This can be used to connect to Victron VE.Can devices (e.g. VE.Can MPPTs), or the port can be reconfigured via the Remote Console for use with a compatible CAN-bus Li-ion Battery
- A USB port
- A 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.
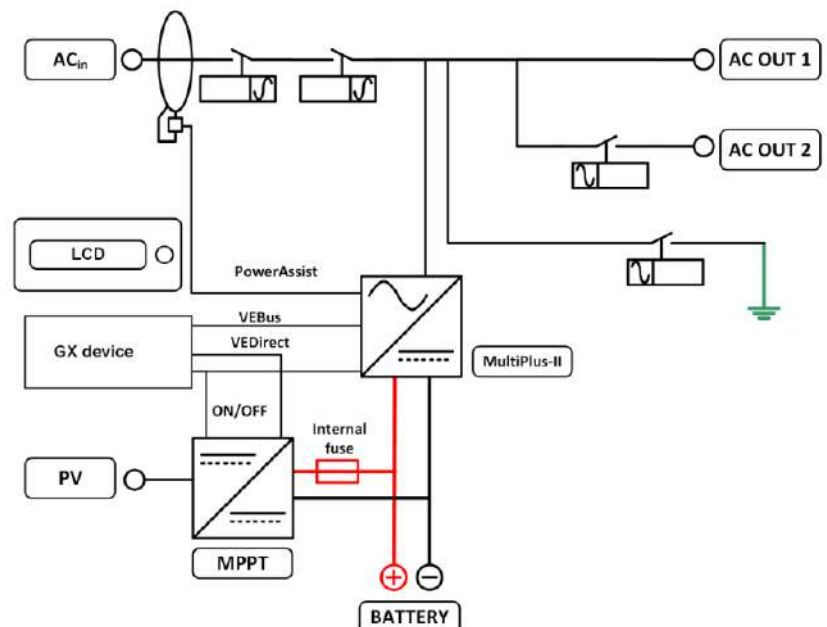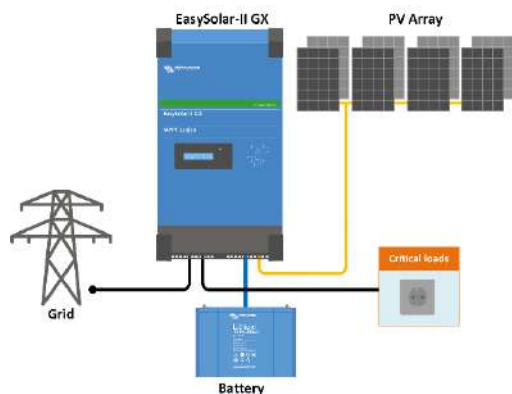
VRM app for wifi
Monitor and manage your Victron Energy system from your smart phone and tablet. Available for both iOS and Android.

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.
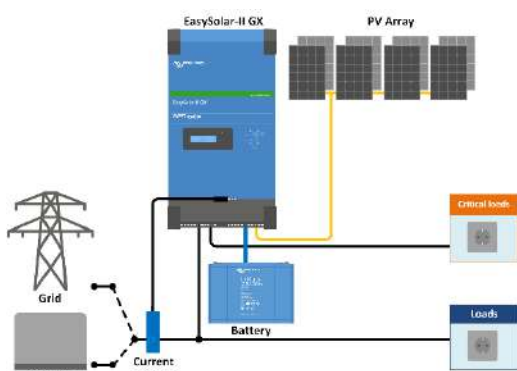
Grid in-line topology

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

Connection area

EasySolar-II GX	EasySolar-II 48/3000/35-32 MPPT 250/70 GX
INVERTER/CHARGER	
PowerControl & PowerAssist	Yes
Transfer switch	32A
Maximum AC input current	32A
Auxiliary output	Yes (32A)
INVERTER	
Input voltage range	38 – 66V
Output	Output voltage: 230 VAC ± 2% Frequency: 50 Hz ± 0,1% (1)
Cont. output power at 25°C (3)	3000VA / 2400W
Cont. output power at 40°C / 65°C	2200W / 1700W
Maximum apparent feed-in power	2500VA
Peak power	5500W
Maximum efficiency	95%
Zero load power	11W
Zero load power in AES mode	7 W
Zero load power in Search mode	2W
CHARGER	
AC Input	Input voltage range: 187-265 VAC Input frequency: 45 – 65 Hz
Charge voltage 'absorption'	57,6V
Charge voltage 'float'	55,2V
Storage mode	52,8V
Maximum battery charge current (4)	35A
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
SOLAR CHARGE CONTROLLER	
Model	SmartSolar MPPT 250/70-Tr
Maximum output current	70A
Maximum PV power	4000W
Maximum PV open circuit voltage	250V
Maximum efficiency	98%
Self-consumption	20mA
Charge voltage 'absorption', default	57,6V
Charge voltage 'float', default setting	55,2V
Protection (2)	a – e
GENERAL	
Interfaces	VE.Can, USB, Ethernet, VE.Direct, wifi
Remote on-off	Yes
Operating temp. range	-40 to +65°C (fan assisted cooling)
Humidity (non-condensing):	max 95%
ENCLOSURE	
Material & Colour	aluminium (blue RAL 5012)
Protection category	IP21
Battery-connection	M8 bolts
PV connection	M6 bolts
230 V AC-connection	Screw terminals 13 mm² (6 AWG)
Weight	26kg
Dimensions (hxwxd)	506 x 275 x 237 mm
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) Non-linear load, crest factor 3:1
4) At 25°C ambient
5) 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