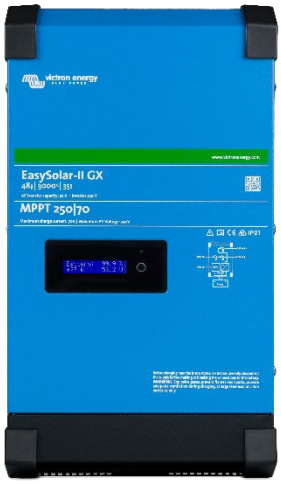
EasySolar-II 3kVA MPPT 250/70 GX, 5kVA MPPT 250/100 GX

The all-in-one solar power solution

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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 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

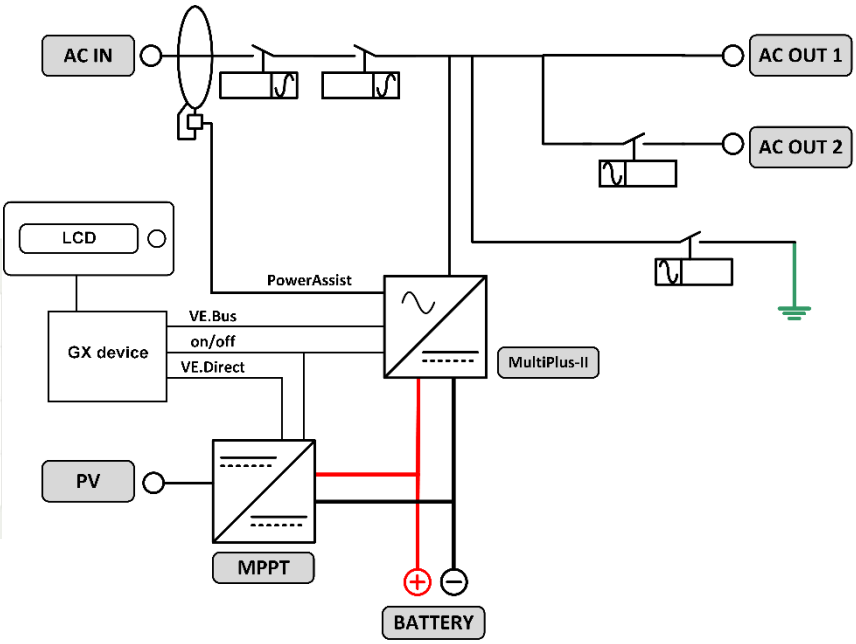
The GX device controls the MultiPlus-II and the SmartSolar MPPT with respectively a VE.Bus and a VE.Direct connection.



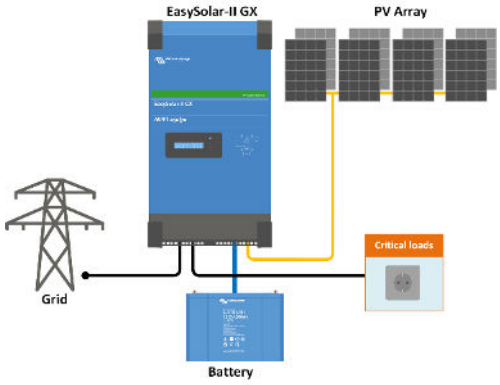
VRM app for Wi-Fi
Monitor and manage your Victron Energy system from your smart phone and tablet. Available for both iOS and Android.



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.



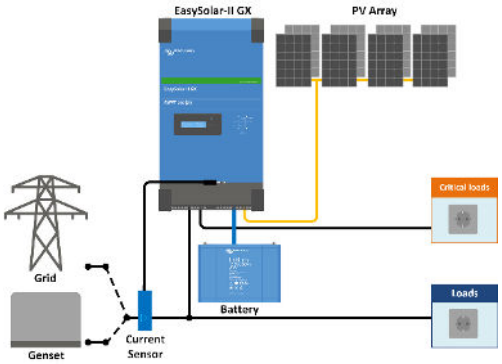
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Grid in-line topology

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	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	Optional, order no.: ASS000001000	
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			
External current sensor (optional)	100A		
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 mm² (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
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: 230 V / 4 A, DC rating: 4 A up to 35 VDC and 1 A up to 60 VDC

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