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# EasySolar-II 48/3000/35-32 MPPT 250/70 GX

## The all-in-one solar power solution



EasySolar-II GX 3 kVA



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



### 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.

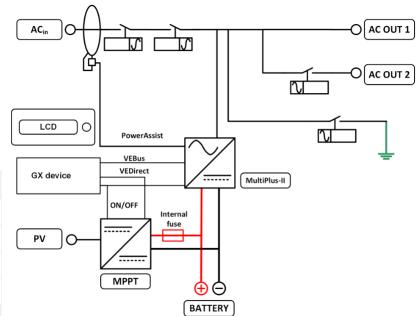
The on/off mechanism of the MultiPlus-II also controls the SmartSolar MPPT.

#### **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

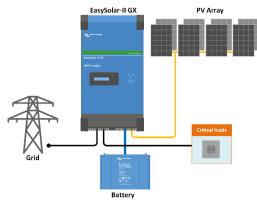
The GX device controls the MultiPlus-II and the SmartSolar MPPT with respectively a VE.Bus and a VE.Direct connection.



#### VRM 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.

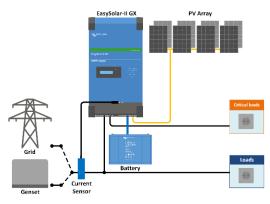




### Grid in-line topology

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 selfconsumption 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
INVE	RTER/CHARGER
PowerControl & PowerAssist	Yes
Transfer switch	32A
Maximum AC input current	32A
Auxiliary output	Yes (32A) INVERTER
Input voltage range	38 – 66V
	Output voltage: 230 VAC $\pm$ 2%
Output	Frequency: 50 Hz $\pm$ 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 Input voltage range: 187-265 VAC
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 Pomoto on off	VE.Can, USB, Ethernet, VE.Direct, wifi Yes
Remote on-off 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 mm <sup>2</sup> (6 AWG)
Weight	26kg
Dimensions (hxwxd)	506 x 275 x 237 mm TANDARDS
	EN-IEC 60335-1, EN-IEC 60335-2-29
Safety	EN-IEC 62109-1, EN-IEC 62109-2 EN 55014-1, EN 55014-2
Emission / Immunity	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
<ol> <li>Can be adjusted to 60 Hz</li> <li>Protection key:         <ul> <li>a) output short circuit</li> <li>b) overload</li> <li>c) battery voltage too high</li> <li>d) battery voltage too low</li> <li>e) temperature too high</li> <li>f) 230 VAC on inverter output</li> <li>g) input voltage ripple too high</li> </ul> </li> </ol>	<ul> <li>3) Non-linear load, crest factor 3:1</li> <li>4) At 25°C ambient</li> <li>5) Programmable relay which can be set for general alarm, DC under voltage or genset start/stop function.</li> <li>AC rating: 230V / 4A, DC rating: 4A up to 35VDC and 1A up to 60VDC</li> </ul>



Victron Energy B.V. | De Paal 35 | 1351 JG Almere | The Netherlands General phone: +31 (0)36 535 97 00 | E-mail: <u>sales@victronenergy.com</u> www.victronenergy.com