# **EASY SOLAR 1600VA**

### ALL in one solar power system 12V 24V 1600VA





#### All-in-one solar power solution

The EasySolar combines a MPPT solar charge controller, an inverter/charger and AC distribution in one enclosure.

The product is easy to install, with a minimum of wiring.

### The solar charge controller: Blue Solar MPPT 100/50

Up to three strings of PV panels can be connected to three sets of MC4 (PV-STo1) PV connectors.

#### The inverter/charger: MultiPlus Compact 12/1600/70 or 24/1600/40

The MPPT charge controller and the MultiPlus Compact inverter/charger share the DC battery cables (included). The batteries can be charged with solar power (BlueSolar MPPT) and/or with AC power (inverter/charger) from the utility grid or a genset.

#### **AC** distribution

The AC distribution consists of a RCD (30 mA/16 A) and four AC outputs protected by two 10A and two 16A circuit breakers.

One 16A output is controlled by the AC input: it will switch on only when AC is available.

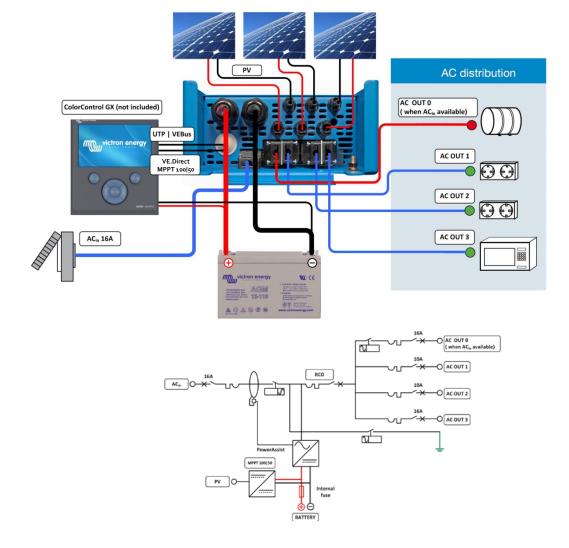
#### **PowerAssist**

Unique PowerAssist technology protects the utility or generator supply from being overloaded by adding extra inverter power when needed.

#### Unique solar application software

Several software programs (Assistants) are available to configure the system for various grid interactive or stand-alone applications. Please see

http://www.victronenergy.nl/support-and-downloads/software/



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EasySolar	EasySolar 12/1600/70	EasySolar 24/1600/40	
T. ( )	Inverter/charger 16A		
Transfer switch		oA ————————————————————————————————————	
Input voltage range	9,5 – 17V	19 – 33V	
'Heavy duty' output AC o		19 – 33 v	
		2: 230 VAC ± 2%	
Output AC1, 2, 3		Frequency: 50 Hz ± 0,1% (1)	
Cont. output power at 25°C (3)	1600VA	1600VA / 1300W	
Cont. output power at 40°C	120	1200W	
Peak power	300	ooW	
Maximum efficiency	92%	94%	
Zero load power	8W	10W	
Zero load power in search mode	2W	3W	
	CHARGER		
AC Input	Input voltage range: 187-265 VAC Input frequency: 45 – 65 Hz Power factor: 1		
Charge voltage 'absorption'	14,4V	28,8V	
Charge voltage 'float'	13,8V	27,6V	
Storage mode	13,2V	26,4V	
Charge current house battery (4)	70A	40A	
Charge current starter battery (A)		4	
Battery temperature sensor	yes		
Programmable relay (5)	yes		
Protection (2)	a - g		
Sol	ar Charge Controller		
Model	MPPT 100/50		
Maximum output current	50 A		
Maximum PV power, 6a,b)	700W	1400W	
Maximum PV open circuit voltage	100V	100V	
Maximum efficiency	98%		
Self-consumption	10 mA		
Charge voltage 'absorption', default setting	14,4V	28,8V	
Charge voltage 'float', default setting	13,8V 27,6V		
Charge algorithm	multi-stage adaptive		
Temperature compensation	-16 mV / °C	-32 mV / °C	
Protection		- g	
COMI	MON CHARACTERISTICS		
Operating temp. range	-20 to +50°C (fan assisted cooling)		
Humidity (non-condensing):		95%	
M	ENCLOSURE	L DAL .	
Material & Colour	aluminium (blue RAL 5012)  IP 21		
Protection category	Battery cables of 1.5 meter		
Battery-connection PV connection	,		
	Three sets of MC4 (PV-ST01) PV connectors.  G-ST18i connector		
230 V AC-connection Weight		15kq	
Dimensions (hxwxd)	745 x 214 x 110mm		
	STANDARDS		
Safety		335-2-29, EN 62109	
Emission / Immunity	EN 55014-1, EN 55014-2, EN 61000-3-3		
Automotive Directive	2004/104/EC		
1) Can be adjusted to 60Hz and to 240V 2) Protection a. Output short circuit b. Overload c. Battery voltage too high d. Battery voltage too low e. Temperature too high	<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 signal function</li> <li>6a) If more PV power is connected, the controller will limit input power to 700 W resp. 1400 W</li> <li>6b) PV voltage must exceed Vbat + 5V for the controller to start.</li> </ul>		
f. 230 VAC on inverter output g. Input voltage ripple too high		Thereafter minimum PV voltage is Vbat + 1V	