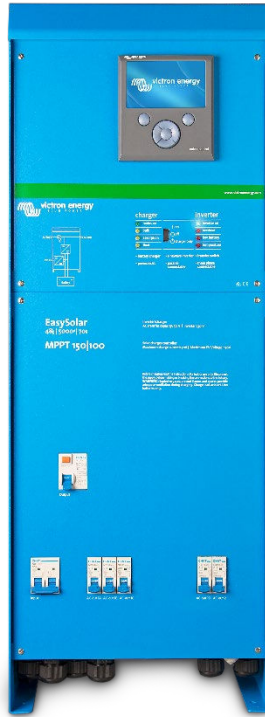


# EasySolar 3 kVA & 5 kVA with Color Control panel

The all-in-one solar power solution

[www.victronenergy.com](http://www.victronenergy.com)



EasySolar 5 kVA

## The 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.

## Color Control panel

Two outstanding functions:

- Prioritizes battery charging by the MPPT charge controller
- Connects to the internet, enabling remote monitoring (VRM website) and remote control.

## AC distribution

The AC distribution consists of a RCD (30mA / 63A) and four AC outputs protected by two 10A and two 16A circuit breakers.

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

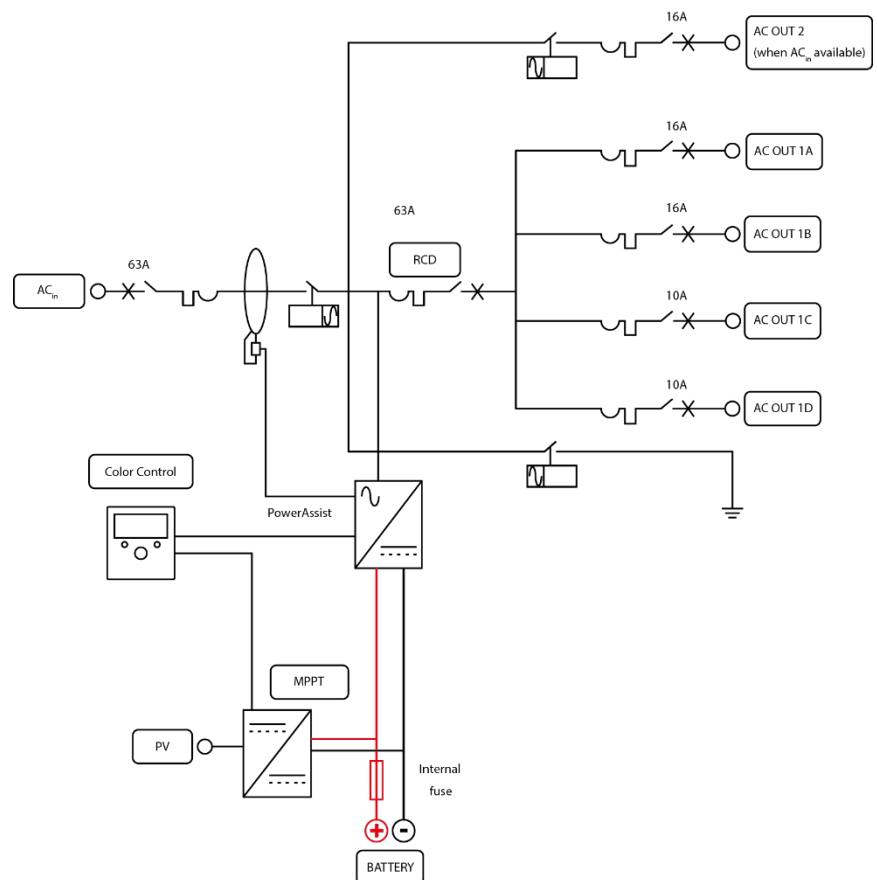
## PowerAssist

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/>



| EasySolar                                                                                                                                                                                                                                                       | EasySolar 24/3000/70-50<br>MPPT150/70                                                                                                                                    | EasySolar 48/5000/70-100<br>MPPT150/100 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| INVERTER/CHARGER                                                                                                                                                                                                                                                |                                                                                                                                                                          |                                         |
| Transfer switch                                                                                                                                                                                                                                                 | 50A                                                                                                                                                                      | 100A                                    |
| INVERTER                                                                                                                                                                                                                                                        |                                                                                                                                                                          |                                         |
| Input voltage range                                                                                                                                                                                                                                             | 19 – 33V                                                                                                                                                                 | 38 – 66V                                |
| 'Heavy duty' output AC 2                                                                                                                                                                                                                                        | 16 A                                                                                                                                                                     |                                         |
| Output AC 1a, 1b, 1c, 1d                                                                                                                                                                                                                                        | Output voltage: 230VAC ± 2%<br>Frequency: 50 Hz ± 0,1% (1)                                                                                                               |                                         |
| Cont. output power at 25°C (3)                                                                                                                                                                                                                                  | 3000VA / 2400W                                                                                                                                                           | 5000VA / 4000W                          |
| Cont. output power at 40°C                                                                                                                                                                                                                                      | 2200W                                                                                                                                                                    | 3700W                                   |
| Cont. output power at 65°C                                                                                                                                                                                                                                      | 1700W                                                                                                                                                                    | 3000W                                   |
| Peak power                                                                                                                                                                                                                                                      | 6000W                                                                                                                                                                    | 10000W                                  |
| Maximum efficiency                                                                                                                                                                                                                                              | 94%                                                                                                                                                                      | 95%                                     |
| Zero load power                                                                                                                                                                                                                                                 | 20W                                                                                                                                                                      | 35W                                     |
| Zero load power in search mode                                                                                                                                                                                                                                  | 10W                                                                                                                                                                      | 15W                                     |
| CHARGER                                                                                                                                                                                                                                                         |                                                                                                                                                                          |                                         |
| AC Input                                                                                                                                                                                                                                                        | Input voltage range: 187-265 VAC<br>Input frequency: 45 – 65 Hz      Power factor: 1                                                                                     |                                         |
| Charge voltage 'absorption'                                                                                                                                                                                                                                     | 28,8V                                                                                                                                                                    | 57,6V                                   |
| Charge voltage 'float'                                                                                                                                                                                                                                          | 27,6V                                                                                                                                                                    | 55,2V                                   |
| Storage mode                                                                                                                                                                                                                                                    | 26,4V                                                                                                                                                                    | 52,8V                                   |
| Charge current                                                                                                                                                                                                                                                  | 70A                                                                                                                                                                      | 70A                                     |
| Battery temperature sensor                                                                                                                                                                                                                                      | yes                                                                                                                                                                      |                                         |
| Programmable relay (5)                                                                                                                                                                                                                                          | yes                                                                                                                                                                      |                                         |
| Protection (2)                                                                                                                                                                                                                                                  | a – g                                                                                                                                                                    |                                         |
| SOLAR CHARGE CONTROLLER                                                                                                                                                                                                                                         |                                                                                                                                                                          |                                         |
| Model                                                                                                                                                                                                                                                           | MPPT 150/70-MC4                                                                                                                                                          | MPPT 150/100-MC4                        |
| Maximum output current (4)                                                                                                                                                                                                                                      | 70A                                                                                                                                                                      | 100A                                    |
| Maximum PV power                                                                                                                                                                                                                                                | 2000W                                                                                                                                                                    | 5800W                                   |
| Maximum PV open circuit voltage                                                                                                                                                                                                                                 | 150V                                                                                                                                                                     |                                         |
| Maximum efficiency                                                                                                                                                                                                                                              | 98%                                                                                                                                                                      |                                         |
| Self-consumption                                                                                                                                                                                                                                                | 10mA                                                                                                                                                                     |                                         |
| Charge voltage 'absorption', default setting                                                                                                                                                                                                                    | 28,8V                                                                                                                                                                    | 57,6V                                   |
| Charge voltage 'float', default setting                                                                                                                                                                                                                         | 27,6V                                                                                                                                                                    | 55,2V                                   |
| Charge algorithm                                                                                                                                                                                                                                                | multi-stage adaptive                                                                                                                                                     |                                         |
| Temperature compensation                                                                                                                                                                                                                                        | -16 mV / °C                                                                                                                                                              | -64 mV / °C                             |
| Protection                                                                                                                                                                                                                                                      | a – g                                                                                                                                                                    |                                         |
| COMMON CHARACTERISTICS                                                                                                                                                                                                                                          |                                                                                                                                                                          |                                         |
| Operating temp. range                                                                                                                                                                                                                                           | -40 to +65°C (fan assisted cooling)                                                                                                                                      |                                         |
| Humidity (non-condensing):                                                                                                                                                                                                                                      | max 95%                                                                                                                                                                  |                                         |
| ENCLOSURE                                                                                                                                                                                                                                                       |                                                                                                                                                                          |                                         |
| Material & Colour                                                                                                                                                                                                                                               | aluminium (blue RAL 5012)                                                                                                                                                |                                         |
| Protection category                                                                                                                                                                                                                                             | IP 21                                                                                                                                                                    |                                         |
| Battery-connection                                                                                                                                                                                                                                              | Four M8 bolts (2 plus and 2 minus connections)                                                                                                                           |                                         |
| PV connection                                                                                                                                                                                                                                                   | Two sets of MC4 PV connectors.                                                                                                                                           | Three sets of MC4 PV connectors         |
| 230 V AC-connection                                                                                                                                                                                                                                             | Screw terminals 13 mm² (6 AWG)                                                                                                                                           |                                         |
| Weight                                                                                                                                                                                                                                                          | 28kg                                                                                                                                                                     | 48kg                                    |
| Dimensions (hwxwd)                                                                                                                                                                                                                                              | 810 x 258 x 218                                                                                                                                                          | 877 x 328 x 241                         |
| STANDARDS                                                                                                                                                                                                                                                       |                                                                                                                                                                          |                                         |
| Safety                                                                                                                                                                                                                                                          | EN 60335-1, EN 60335-2-29, EN 62109-1                                                                                                                                    |                                         |
| Emission / Immunity                                                                                                                                                                                                                                             | EN 55014-1, EN 55014-2, EN 61000-3-3, EN 61000-6-3, EN 61000-6-2, EN 61000-6-1                                                                                           |                                         |
| Anti-islanding                                                                                                                                                                                                                                                  | See our website                                                                                                                                                          |                                         |
| 1) Can be adjusted to 60Hz and to 240V<br>2) Protection:<br>a. Output short circuit<br>b. Overload<br>c. Battery voltage too high<br>d. Battery voltage too low<br>e. Temperature too high<br>f. 230 VAC on inverter output<br>g. Input voltage ripple too high | 3) Non-linear load, crest factor 3:1<br>4) At 25°C ambient<br>5) Programmable relay which can be set for general alarm, DC under voltage or genset start signal function |                                         |