

SmartSolar MPPT 150/45 Solar Charge Controller by Victron



Price: CAD \$349.00

SKU: VESMARTMPPT-150/45

Product Categories: [Charge Controllers](#), [MPPT : 40A-59A](#), [Shop](#)

Product Tags: [150/45](#), [150V](#), [45a](#), [canada](#), [MPPT](#), [smart mppt](#), [SmartSolar MPPT 150/45](#), [SmartSolar MPPT 150/45 canada](#), [victron smart](#)

Product Page:

<https://www.modernoutpost.com/product/smartsolar-mppt-150-45-solar-charge-controller-by-victron/>

Product Summary

This is the SmartSolar MPPT 150/45 solar charge controller by Victron. One of their popular Bluetooth enabled models. At 150V, you have the latitude to wire your modules in either series or parallel, and 45A of processing capacity is a great fit for small cabin systems using 12V, 24V, 36V, or 48V battery platforms of any chemistry. Get the advanced features you want in this compact unit.

Product Description

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Key SmartSolar MPPT 150/45 Features

- Ultra-fast Maximum Power Point Tracking (MPPT) - Advanced Maximum Power Point Detection in case of partial shading conditions - Outstanding conversion efficiency with no fan cooling exceeding %98 - Fully programmable charge algorithm with eight pre-programmed algorithms, selectable with a rotary switch - Extensive electronic protection - Internal temperature sensor - Real-time data display using VictronConnect application. - 3 Charging stages: Bulk - Absorption - Float

The Victron SmartSolar Charge Controller has an ultra-fast Maximum power point tracking (MPPT) controller that improves the energy harvest by 30% compared to PWM controllers and by up to 10% compared to the slower MPPT controllers.

Especially in the clouded sky when the light intensity is changing continuously.

The Victron SmartSolar 150/45 Charge Controller uses the advanced Maximum Power Point Detection in cases of partial shading conditions. at times of partial shading happens two or more maximum power points can be presented on the power-voltage curve. Conventional MPPTs tend to lock to a local Maximum Power Point (MPP), which may not be optimum; however, the innovative SmartSolar algorithm will always maximize the energy harvest by locking to the optimum MPP.

Remote management and set-up is performed through your smartphone or other Bluetooth-enabled devices. This feature can be used to control, monitor, and update the system wirelessly in the comfort of your home using the VictronConnect application. You also be connected directly to a Color Control GX, computer, or other devices.

The SmartSolar MPPT 150/45 charger is equipped with an internal temperature

sensor to compensate for the charging voltage according to its temperature. If the system temperature rises, the controller's Extensive electronic protection will automatically reduce its output current (temperature >40°C). In addition to the mentioned protection systems, also this system is equipped with safety devices against overheating, short circuits, polarity reversal, and module current reversal.

SmartSolar MPPT 150/45 Specifications

Battery voltage : 12 / 24 / 48V Auto Select (software tool needed to select 36V)

Rated charge current : 45A

Nominal PV power : 12V: 650W / 24V: 1300W / 36V: 1950W / 48V: 2600W

Max. PV short circuit current 2) : 50A

Maximum PV open circuit voltage : 150V (absolute maximum coldest conditions)

Maximum efficiency : 98%

Self-consumption : 12V: 20mA, 24V: 15mA, 48V: 10mA

Charge voltage 'absorption' Default setting : 14,4 / 28,8 / 43,2 / 57,6V
(adjustable)

Charge voltage 'float' Default setting : 13,8 / 27,6 / 41,4 / 55,2V (adjustable)

Charge algorithm : multi-stage adaptive (eight pre-programmed algorithms)

Temperature compensation : -16 mV / -32 mV / -64 mV / °C

Protections : PV reverse polarity / output short circuit / over-temperature

Operating temperature : -30 to +60°C (full rated output up to 40°C)

Humidity : 95%, non-condensing

Data communication port : VE.Direct

ENCLOSURE

Power terminals : 16 mm² / AWG6

Protection category : IP43 (electronic components), IP22 (connection area)

Weight : 1.25 kg

Dimensions (h x w x d) : 130 x 186 x 70 mm

STANDARDS

Safety : EN/IEC 62109-1, UL 1741, CSA C22.2

Document Downloads

[Victron MPPT Controller Overview](#) [SmartSolar 150/45 Spec Sheet](#) [SmartSolar 150/45 User Manual](#)] **Other Victron controllers in this series... SmartSolar MPPT 150/35 SmartSolar MPPT 150/60**

Product Attributes

- Dimensions: 1 × 1 × 1 cm
- Weight: 1.49 kg