

SmartSolar MPPT 100/20 by Victron



Price: CAD \$142.00

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Product Categories: [Charge Controllers](#), [MPPT : 20A-29A](#), [Shop](#)

Product Tags: [100v](#), [20a](#), [canada](#), [charge controller](#), [controller](#), [MPPT](#), [mppt 100/20](#), [mppt 100/20 canada](#), [smart mppt 100/20](#), [smart mppt 100/20 canada](#), [smartsolar mppt](#), [solar charge controller](#), [victron](#), [victron 20a](#), [victron charge controller](#), [victron smartsolar](#)

Product Page:

<https://www.modernoutpost.com/product/smartsolar-mppt-100-20-by-victron/>

Product Summary

This is the popular Victron SmartSolar MPPT 100/20 Solar Charge Controller. Check the list of advanced features and you'll quickly understand why this controller is the preferred option for smaller systems. Support for 12V, 24V, & 48V battery platforms and all chemistries means you can design your system with the future in mind.

Product Description

This is the popular Victron SmartSolar MPPT 100/20 Solar Charge Controller. Check the list of advanced features and you'll quickly understand why this controller is the preferred option for smaller systems. Support for 12V, 24V, & 48V battery platforms and all chemistries means you can design your system with the future in mind. Processing 20A of power places this controller at the top of Victron's advanced line of controllers. Using the latest, fastest technology, SmartSolar controllers maximize this energy-harvest, driving it intelligently to achieve full charge in the shortest possible time. SmartSolar maintains battery health, extending its life. With processing power of 290W on a 12V battery platform, or 580W on a 24V platform, or 1160W on a 48V platform, this controller can support a wide range of solar array sizes, and is a great fit for cabins, van conversions, RVs, and boats. The 100V input range provides you with the latitude to design your solar array for series or parallel configuration as required. Even in cold Canadian winter weather where voltage rise can wreak havoc on lesser controllers.

SmartSolar MPPT 100/20 Features

Bluetooth Smart built-in

The wireless solution to set-up, monitor, update and synchronize SmartSolar Charge Controllers.

VE.Direct

For a wired data connection to a Color Control GX, other GX products, PC or other devices.

Ultra-fast Maximum Power Point Tracking (MPPT)

Especially in case of a clouded sky, when light intensity is changing continuously, an ultra-fast MPPT controller will improve energy harvest by up to 30% compared to PWM charge controllers and by up to 10% compared to slower MPPT controllers.

Load output

Over-discharge of the battery can be prevented by connecting all loads to the load output. The load output will disconnect the load when the battery has been discharged to a pre-set voltage (48V model: interface with a relay).

Alternatively, an intelligent battery management algorithm can be chosen: see Battery Life.

The load output is short circuit proof.

Battery Life: intelligent battery management

When a solar charge controller is not able to recharge the battery to its full capacity within one day, the result is often that the battery will continually be cycled between a 'partially charged' state and the 'end of discharge' state. This mode of operation (no regular full recharge) will destroy a lead-acid battery within weeks or months.

The Battery Life algorithm will monitor the state of charge of the battery and, if needed, day by day slightly increase the load disconnect level (i.e. disconnect the load earlier) until the harvested solar energy is sufficient to recharge the battery to nearly the full 100%. From that point onwards, the load disconnect level will be modulated so that a nearly 100% recharge is achieved about once every week.

Programmable battery charge algorithm

See the software section on the Victron website for details

Day/night timing and light dimming option

See the software section on the Victron website for details

Internal temperature sensor

Compensates absorption and float charge voltage for temperature.

Optional external battery voltage and temperature sensing via Bluetooth

A Smart Battery Sense or a [BMV-712](#) Smart Battery Monitor can be used to communicate battery voltage and temperature to one or more SmartSolar Charge Controllers.

Fully discharged battery recovery function

Will initiate charging even if the battery has been discharged to zero volts.

Will reconnect to a fully discharged Li-ion battery with integrated disconnect functionRemote

SmartSolar MPPT 100/20 Specifications

Battery voltage : 12/24/48V Auto Select

Rated charge current : 20A

Nominal PV power, 12V : 290W

Nominal PV power, 24V : 580W

Nominal PV power, 24V : 1160W

PV short circuit current : 20A

Automatic load disconnect : Yes

Maximum PV open circuit voltage : 100V

Peak efficiency 98%

Self-consumption (load off) : 12V = 10 mA / 24V = 8 mA / 48V = 7 mA

[Download the full Spec Sheet here](#)]

Product Attributes

- Weight: .9 kg