

Tristar MPPT 60 Solar Charge Controller by Morningstar



Price: CAD \$999.00 - CAD \$1,299.00

SKU: MSTRISTARMPPT45-1

Product Categories: [Charge Controllers](#), [MPPT : 60A-100A](#), [Shop](#)

Product Tags: [60a](#), [60a mppt](#), [canada](#), [charge controller](#), [morningstar mppt 60](#), [MPPT](#), [regulator](#), [solar](#), [solar charge controller](#), [Tristar](#), [tristar 60](#), [tristar mppt 60](#), [tristar mppt 60 canada](#), [tristar mppt canada](#), [ts-mppt-60](#), [ts-mppt-60m](#)

Product Page:

<https://www.modernoutpost.com/product/tristar-mppt-60-solar-charge-controller-by-morningstar/>

Product Variants

- Tristar MPPT 60 Solar Charge Controller by Morningstar - Standard ()
- Tristar MPPT 60 Solar Charge Controller by Morningstar - With Meter Face ()

Product Summary

One of the leading charge controllers in its class, year after year. Morningstar's TriStar MPPT 60 solar controller with TrakStar Technology is an advanced maximum power point tracking (MPPT) battery charger for off-grid photovoltaic (PV) systems up to 3.2kW.

Product Description

One of the leading charge controllers in its class, year after year. Morningstar's TriStar MPPT 60 solar controller with TrakStar Technology is an advanced maximum power point tracking (MPPT) battery charger for off-grid photovoltaic (PV) systems up to 3.2kW.

The controller provides the industry's highest peak efficiency of 99% and significantly less power loss compared to other MPPT controllers. The TriStar MPPT features a smart tracking algorithm that maximizes the energy harvest from the PV by rapidly finding the solar array peak power point with extremely fast sweeping of the entire I-V curve. This product is the first PV controller to include on-board Ethernet for a fully web-enabled interface and includes up to 200 days of data logging.

Model Numbers

TS-MPPT-60

TriStar MPPT 60 Key Features and Benefits

Maximizes Energy Harvest

TrakStar MPPT Technology features:

- Better peak power point tracking than other MPPT controllers
- Very fast sweeping of the entire I-V curve
- Recognition of multiple power points during shading or mixed PV arrays
- Excellent performance at sunrise and low solar insolation levels

Extremely High Reliability

- Robust thermal design and no cooling fans

- Parallel circuit design provides less stress and longer life for electronic components
- No mechanical relays
- Extensive electronic protections including PV short circuit protection
- Epoxy encapsulated inductors and conformally coated printed circuit boards

Very High Efficiency

- Peak efficiency of 99%
- Proprietary tracking algorithm minimizes power losses
- Low self-consumption
- Continuous operation at full power to 45°C without need to de-rate
- Selected electronic devices with higher ratings to minimize losses from heating

Extensive Networking and Communication Capabilities

Enables system monitoring, data logging and adjustability. Uses open standard MODBUS™ protocol and Morningstar's MS View software.

- Meterbus: communications between compatible Morningstar products
- Serial RS-232: connection to a personal computer
- EIA-485: communications between multiple devices on a bus
- Ethernet: fully web-enabled interface to a local network or internet; view from a web browser or send email/text messages
- EMC-1: IP based network and internet connectivity

Metering and Data Logging

- TriStar meter and remote meter provides detailed operating data, alarms and faults
- Three LEDs display system status
- Up to 200 days of data logging via meters or communications ports
 - Certified to IEC 62093

TriStar MPPT 60 Specifications...

Model : TS-MPPT-60

Meter

TS-M2 : Optional (See the TS-MPPT-60M in the order form)

TS-RM2 : Optional

Electrical

Maximum Battery Current 60 amps

Nominal Maximum Operating Power*

12 Volt : 800W

24 Volt : 1600W

48 Volt : 3200W

Peak Efficiency : 99%

Nominal System Voltage : 12, 24, or 48 volts DC

Maximum PV Open Circuit Voltage** : 150 volts DC

Battery Operating Voltage Range : 8-72 volts DC

Maximum Self-consumption : 2.7 Watts

Transient Surge Protection : 4500 Watts/port

Battery Charging Algorithm : 4-stage

Charging Stages : Bulk, Absorption, Float, Equalize

[Download the complete spec sheet here](#)] **Notes**

*Input power can exceed Nominal Maximum Operating Power, but controller will limit and provide its rated continuous maximum output current into batteries. This will not harm the controller (reminder: do not exceed Voc).

**Exceeding Maximum PV Open Circuit Voltage may damage the controller.

Warranty : Five year warranty period.

Product Attributes

- Dimensions: 1 × 1 × 1 cm
- Weight: 3 kg
- Model: Standard, With Meter Face