



TRI STAR™

THREE-FUNCTION SOLAR CONTROLLER

Morningstar's **TriStar Controller** is a three-function controller that provides reliable solar battery charging, load control or diversion regulation. The controller operates in one of these modes at a time and two or more controllers may be used to provide multiple functions.

The TriStar uses advanced technology and automated production to provide exciting new features at a competitive cost. The optional TriStar meter is the most sophisticated and informative controller meter on the market. The controller is UL listed and is designed for both solar home systems and professional applications.



Product shown with optional meter.



45 or 60 amps
at 12-48 volts

Key Features and Benefits

Highest Reliability

Large heat sink **1** and conservative design enables operating at full ratings to 60°C. No need to de-rate.

More Power

Ratings to 60A at 48VDC will handle solar arrays up to 4kW.

Communications Capability

RS-232 **2** connects to a personal computer for custom settings, data logging and remote monitoring and control.

Fully Adjustable

DIP switch **3** provides user with a choice of 7 different digital presets and custom settings via RS-232.

Extensive Electronic Protections

Fully protected against reverse polarity, short circuit, overcurrent, high temperature and overvoltage.

Simple Mechanical Interface

Larger power terminals **4** and conduit knockouts **5**. Extra space for wire turns. Fits on power panels.

Better Battery Charging

Connecting battery sense wires **6** and optional remote temperature sensor **7** will improve control accuracy. Constant voltage series PWM algorithm increases battery capacity and life.

More Information

3 LED's **8** to indicate status, faults and alarms. Optional meter **9** displays extensive system and controller information, automatic self-test and reset capabilities. Meter connection via RJ-11 phone jack **10**.

Easy to Reset

Pushbutton **11** provides manual reset and stop/start battery equalization or load disconnect.

Low Telecom Noise

DIP switch setting will change PWM to "On-Off" battery charging.

