

# TriStar MPPT Live View Web Pages

## Glossary of Displayed Values

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### **Synopsis:**

A glossary of definitions for values and settings displayed in the TriStar Live View webpages. These webpages are served by the TriStar MPPT Ethernet-enabled charge controllers.

## Live Data View

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**Battery Voltage** - instantaneous battery bank voltage

**Target Voltage** - voltage setpoint to which the battery will be charged given the charge state and battery temperature.

**Charge Current** - instantaneous current into the battery

**Charge State** - the current stage of the 4-stage charging algorithm

**Output Power** - instantaneous power into the battery

**Array Voltage** - instantaneous solar array voltage

**Array Current** - instantaneous solar array current

**Sweep Vmp** - the maximum power voltage of the array measured during the last sweep. Only updated when the battery is in Bulk charge stage.

**Sweep Voc** - the open circuit voltage of the array measured during the last sweep. Only updated when the battery is in Bulk charge stage.

**Sweep Pmax** - the maximum power produced by the array during the last sweep. Only updated when the battery is in Bulk charge stage.

**Battery Temperature** - battery temperature if a Remote Temperature Sensor is attached.

**Heatsink Temperature** - the internal temperature of the finned heatsink.

**Amp Hours** - resettable amp hour counter, clear with TriStar meter or MSView

**Kilowatt Hours** - resettable kWhr counter, clear with TriStar meter or MSView

**Alarms** - instantaneous alarms reported

**Faults** - instantaneous faults reported

## Network Settings

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**NETBIOS Name** - a unique address that can be used instead of the IP address to view the TSMPPPT webpages; may not be supported by all operating systems such as MAC.

**MAC address** - an address that uniquely identifies the TSMPPPT hardware on the network. unlike an IP, this address never changes.

**IP Address** - the network address assigned to the TSMPPPT. may be static (never changes) or dynamically assigned by the DHCP server.

**Subnet Mask / Default Gateway / Primary & Secondary DNS** - manually assigned network settings for TCP networks. Refer to the *Ethernet Network Configuration* document for more information.

**Controller Name** - the name reported in email, text message, and SNMP notifications

**DHCP or Static IP option** - choose between manually specifying the network settings or allowing DHCP to automatically assign them. Refer to the *Ethernet Network Configuration* document for more information.

**HTTP Port** - specify the port for all web traffic, port 80 is the default. only change if necessary.

**ModbusIP Port** - specify the port for all ModbusIP communication, port 502 is the default. only change if necessary.

**Modbus Server ID** - an address that uniquely identifies the TSMPPPT on a Modbus network, this address is used for all Modbus communication through RS-232, EIA-485, and Ethernet

**MeterBus ID** - an address that uniquely identifies the TSMPPPT on Morningstar's proprietary Meter-Bus network

**SNMP destination NMS port** - specify the port for all SNMP TRAP notifications and other traffic, port 162 is the default.

**MIB file** - link to the TSMPPPT SNMP management information base (MIB) file, contains definitions and information about the properties supported by the TSMPPPT

**Bridge Modbus requests option** - select this option to allow incoming ModbusIP requests that are not addressed to the receiving TSMPPPT to be re-broadcast on the EIA-485 network, this feature allows communication with other Modbus compliant devices that are networked to the TSMPPPT through EIA-485 to share the Ethernet connection.

**Ethernet Power Saving Mode option** - enables "Green Ethernet" functionality; powers down the Ethernet port to save energy and periodically checks for a connection to a network.

# Datalog

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**Day** - label for each column of logged data, specifies number of days ago, a -4 = 4 days ago

**Events** - displays the number of events that occur each day, hold the mouse over the number to display the list of events.

**Hourmeter** - the value of the timestamp for each daily record

**Max. Battery Voltage** - the highest battery voltage recorded for the day, this value may or may not be the same as the long term maximum battery value reported by the meter or MSView

**Min. Battery Voltage** - the lowest battery voltage recorded for the day, this value may or may not be the same as the long term minimum battery value reported by the meter or MSView

**Max. Array Voltage** - the highest array input voltage recorded for the day

**Max. Output Power** - the highest battery output power recorded for the day

**Amp hours** - the total Ah accumulated each day

**Watt hours** - the total Wh accumulated each day

**Max. Battery Temp.** - the highest battery temperature recorded for the day

**Min. Battery Temp.** - the lowest battery temperature recorded for the day

**Equalize timer** - number of minutes the battery was in Equalize charge stage each day.

**Float timer** - number of minutes the battery was in Float charge stage each day.

**Absorption timer** - number of minutes the battery was in Absorption charge stage each day.

**Faults** - faults logged each day

**Alarms** - alarms logged each day