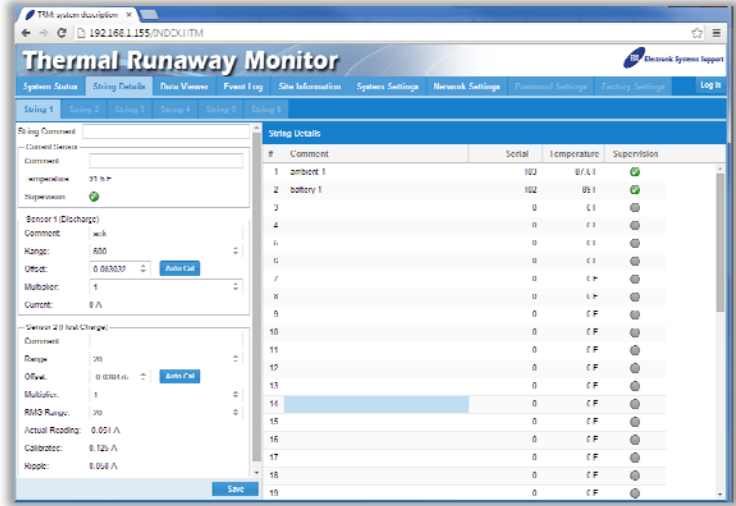


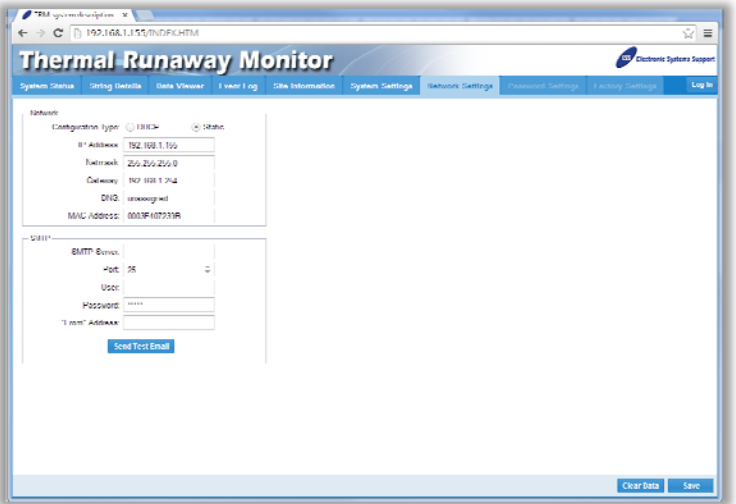
String Details

1. Enter **String Comment** (description). Generally it is the String Name.
2. Enter comment for CT Sensor (controller)
3. Fill in fields for Discharge and Float CT Sensors.
4. Add comments to Ambient and Pilot Temperature Probes. i.e. Location Notes
5. With CT's not installed, but connected to CT Controller, closed and locked, click **Auto Cal** on both Discharge and Float CT's to calibrate them.
6. You MUST enter Serial Numbers of each temperature probe. Serial Numbers listed on stickers located on the sides or the bottom of each temperature probe.
7. Click **Save**.



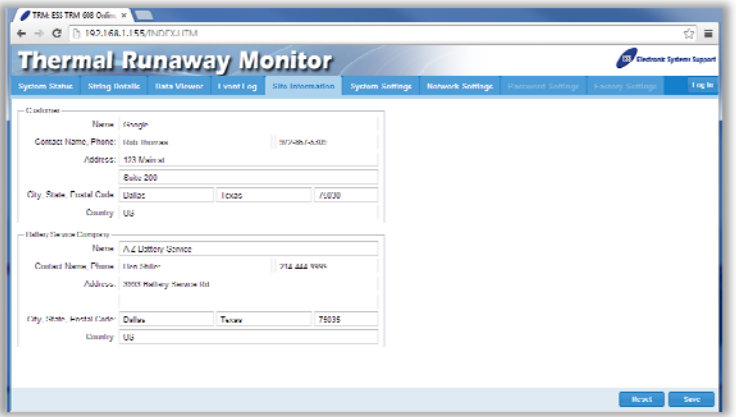
Network Settings

1. If the TRM-608 monitor was set up using PuTTY software, the network settings will not need to be filled out.
2. Once it is verified that the Network settings are correct, click save.
3. The TRM-608 Monitor will send out email alerts only if the SMTP information is entered. To verify that the email alerts are working, click the "Send Test Email" button and wait for test email to arrive at recipient's in box.
4. Click Save to store all settings.



Site Information

1. Fill in all fields in the Customer's Information box.
2. Battery Service Company information should be filled out completely so that record exists of the company that works on the system. Both sets of information are useful to have available for warranty issues and also when multiple sites are being operated by the same company. When exporting data and inserting into maintenance reports, this data will be included.



See User Manual for detailed information regarding the setup and installations of the TRM-608 Monitor.

TRM-608 QUICK START GUIDE



Special precautions and care have been taken to ensure your TRM-608 monitor arrives safe and undamaged. However, upon receipt, you should inspect the entire shipment for evidence of damage that may have occurred during transit. Review the list of components below to ensure all of the components are in the package.

TRM-608 Monitor "Main" Package

- TRM-608 Monitor Controller (1 ea)
- Mounting Bracket, 23" (2 ea)
- Mounting Bracket, 19" (2 ea)
- Ambient Temperature Probe (1 ea)
- Battery Voltage Cable Assembly (1 ea)
- Ground Cable Assembly (1 ea)
- Installation Hardware Kit (1ea)
- Power Supply (1 ea)
- Cross Over Cable, 10' (1 ea)
- USB Cable, 6' (1 ea)
- CAT 5 Cable, 3' (1 ea)



TRM-608 Monitor Controller



Mounting Brackets 19" and 23"



Battery Voltage Cable Assembly



Ambient Temperature Probe



Ground Cable Assembly



Power Supply, 100-240Vac



Crossover Cable, 10 ft.



USB Cable, 6 ft.



Cat 5 Cable, 3 ft.

Installation Kit (bagged)

- USB Flash Drive(1)
- Spare Fuse, 0.5A (1)
- 8 Pos. Connector (1)
- Ground Terminal Ring, #10 (2)
- Screw, 10-32x1/2, Self Tap (1)
- Rack Mount Screws, 12-24x3/4, Self Tap (6)
- Screws, SEMS, 6/32x3/8 (6)
- Velcro Strips, 3" (2)
- Tab Washers (2)

TRM-608 Monitor "String" Package

- Current Transducer Controller Assembly (1 ea)
- Current Transducer Assembly, 600A (1 ea)
- Current Transducer Assembly, 20A (1 ea)
- Pilot Temperature Probe Assembly (1 ea)
- CAT 5 Cable, 14' (1 ea)
- CAT 5 Cable, 7' (1 ea)



Current Transducer Controller



Current Transducer, 600A



Current Transducer, 600A



Pilot Cell Temperature Probe



CAT 5 Cable, 14ft.



CAT 5 Cable, 7ft.

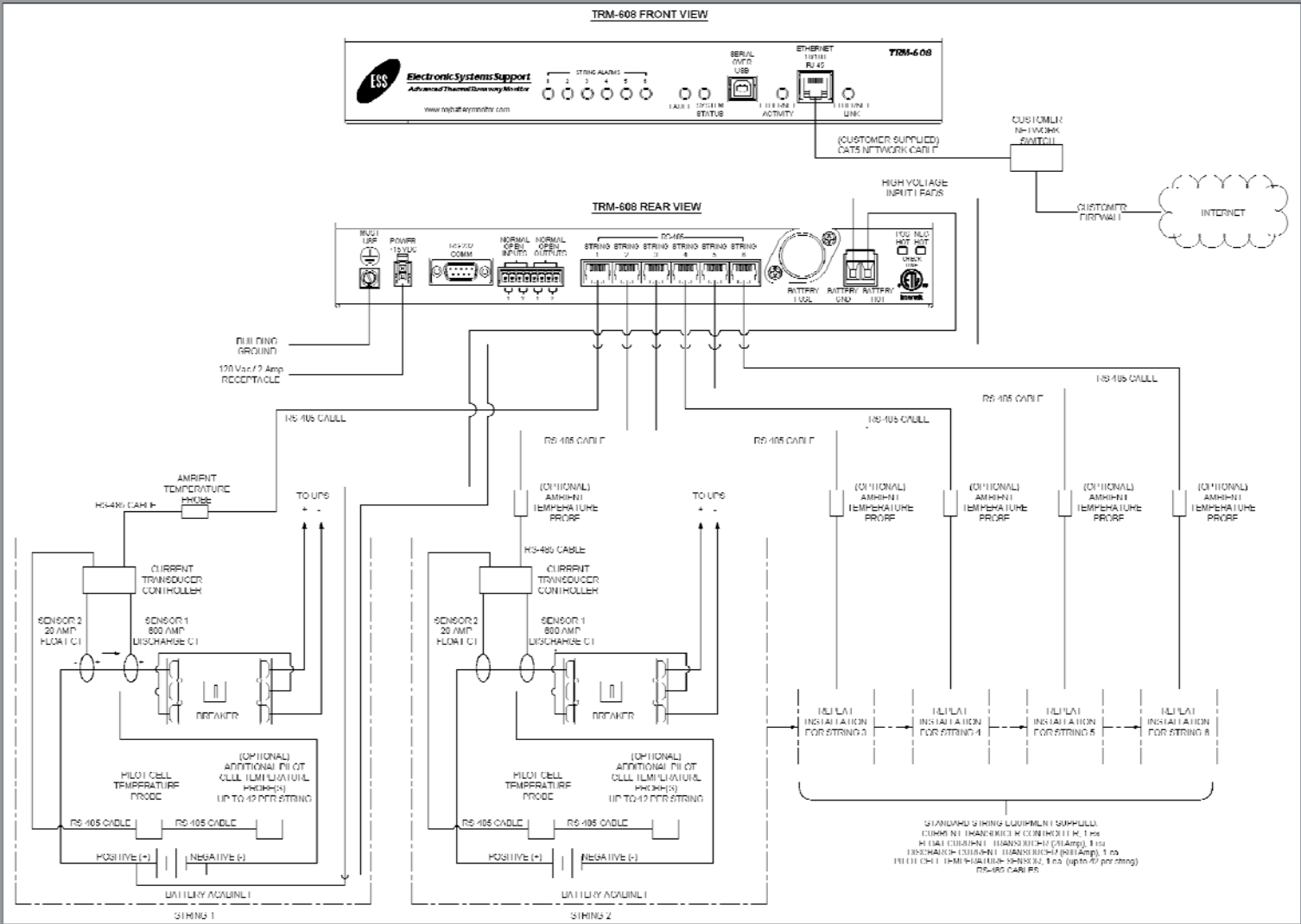
A single TRM-608 controller will monitor up to 6 strings of -60 to 600Vdc. Follow the diagram and the instructions in following pages to easily install and setup your new TRM-608 Advanced Thermal Runaway Monitor. In some instances, you will need to reference the User's Manual for more detailed instructions.

Technical Specifications:

- Equipment Input Ratings: 15 VDC, 1.67 A
- Measurement Circuit Ratings: -60 to +600VDC, 0.5a



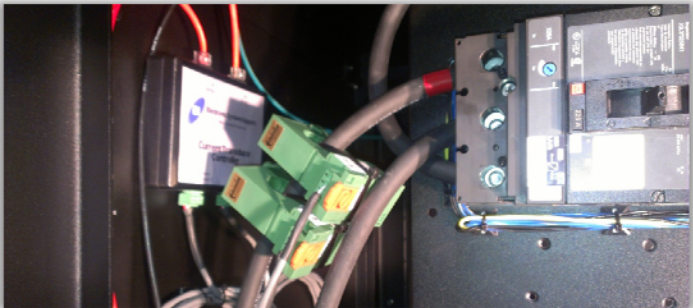
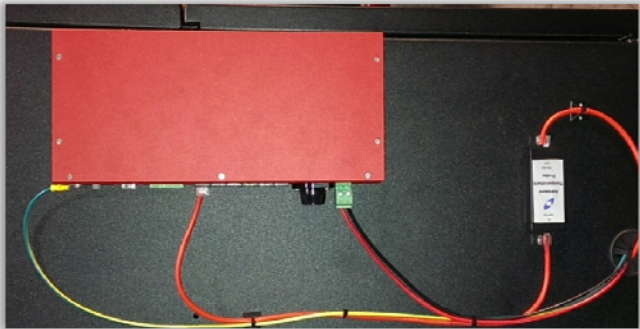
WIRING DIAGRAM FOR 1-6 STRINGS



Installation

If a TRM-608 Monitor was purchased with a battery cabinet, the monitor will be partially installed on the cabinet and only a few connections are necessary. Verify that all components shown in the front page of this guide are accounted for. Follow the diagram above and the simple instructions below to complete the installation. For aftermarket installations, it may be necessary to reference Section 5.2 of the user's manual.

1. Locate TRM-Main Controller on top of a centralized cabinet or mount the Main Controller to a rack. Brackets for rack mounting are included in the TRM packaging. Use Velcro to secure controller.
2. Ground the TRM Main Controller chassis using Ground cable provided. Hardware is also included in the installation hardware kit.
3. Locate ATP (Ambient Temperature Probe) near controller.
4. Locate or install CT Controller inside cabinet or near the string breaker.
5. Make all connections between CT Controller, ATP, and Main Controller.
6. Install Current Transducers on positive lead going into breaker as shown in diagram. Notice polarities on each (positive side of CT towards breaker). Connect CT assemblies to CT Controller as shown above. Follow labels of components.
7. Add Pilot Temperature Probe (PTP). Locate on top of outermost positive battery or hottest area of cabinet. Connect PTP to CT Controller.
8. Connect Battery Voltage cable assembly to outermost positive and negative terminals in battery string. Tab washers are provided. Leads of cable assembly are pre-terminated. Connect opposite end to TRM- Main controller.
9. Connect network cable to Ethernet connector in front of TRM-Main.
10. Connect power supply to rear of TRM-Main.
11. See TRM-608 Monitor Setup.



TRM-608 Monitor Setup

Setting up the TRM-608 Monitor correctly is the most important step in order for the user to be able to see the monitor via Internet. Please reference Sections 6.1 and 6.2 of the user's manual to correctly setup the monitor. These two sections have detailed instructions on how to properly set up the TRM-608 Monitor to the local network or to a dedicated desktop computer or laptop.

TRM-608 Monitor Interface

System Status	Displays the real time status of System Voltage, String and System Currents, Ambient and Pilot Temperatures, Battery Cycles, and External Alarms.
String Details	Displays the details of strings 1 though 6. Each string will have its own tab. Here each Sensor's reading can be seen and if the sensor is functioning properly. CT's can be calibrated from here.
Data Viewer	Displays graphs with all functions defined in simple color codes. System Voltage, String Currents, String Ripple Currents, String Ambient and String Pilot Temperatures for up to 6 strings are all represented on this page.
Event Log	Displays the last 100 events with a priority and description of each event and a time stamp.
Site Information	Displays the customer's address and contact info as well as the Battery Service Company's contact info and address. This data is included when exporting and is used for custom reports to present end users, service providers or battery warranty claim.
System Settings	Displays general information on the battery and strings that are being monitored. Thresholds, email recipients, external alarms and miscellaneous information is entered in this page.
Network Settings	Displays the network settings that have been entered. This is also where the e-mail server is setup for sending alarms.
Password Settings	Used to update passwords settings. Must be logged into the monitor to change password settings.

Programming TRM-608 Monitor

Logging In

Type in the IP address of the TRM-608 monitor you wish to view in WEB browser. Once the Dashboard page appears, click the Log In button on the top right corner of the page. Log in using default credentials below.

User: installer  
Password: installer

System Settings

1. Click on the **System Settings** tab.
2. Enter a System Description.
3. Fill in all **Battery Strings** and **Thresholds** fields.
4. Enter email recipients for alerts.
5. Select **System Time Zone** and click **Set System Time**.
6. Enter any external alarm descriptions if any.
7. Click **Save** at bottom right to save changes. If you do not click **Save** prior to navigating out of the page, the settings will not be stored and you will have to re-enter settings from the beginning.

\*Note: For a more detailed explanation on what each field is for in the system Settings tab, refer to Section 6.4.2 of the User's Manual.

