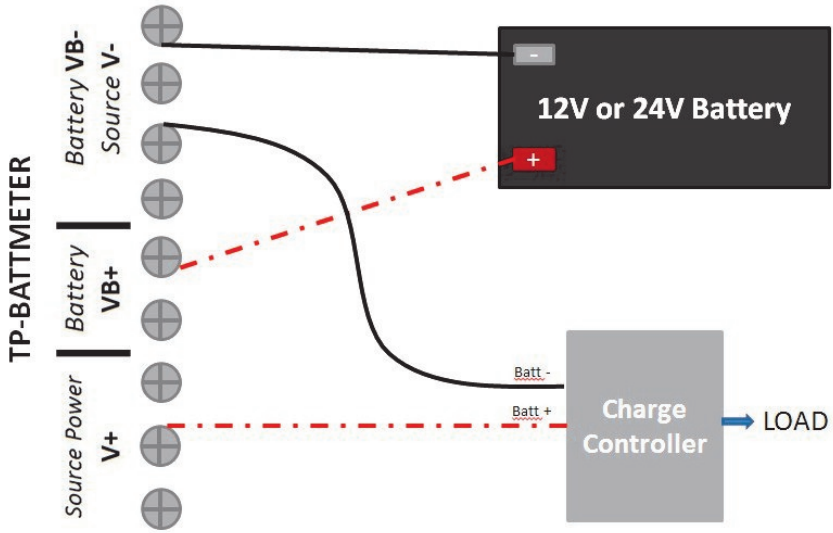
BATTMETER

Quick View System Monitor

- Remote Power Stations
- Backup Power Systems
- Recreational Vehicles
- Boats, Motor Homes
- Remote Cabins

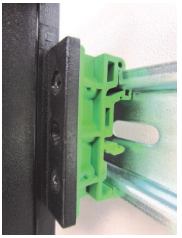
Congratulations! on your purchase of the TP-BATTMETER Quick View System Monitor. Please take a moment to review this Qwik Install Guide before assembly or battery installation.

Recommended Tools: Phillips Screwdriver



Qwik Install

STEP 0: The BATTMETER is normally installed between a power source like a charge controller or generator and the battery or battery array. The load would normally be connected to the charge controller. If load is connected directly to the battery the load would be connected to the V+ and V– terminals of the BATTMETER,



STEP 1: Install the BATTMETER to a wall or to a DIN Rail using the included green DIN Rail adapters. The DIN rail adapters have a fixed end which normally goes towards the top and a latch end that normally goes towards the bottom.

STEP 2: Connect up to 12AWG wire from the Battery negative terminal to one of the BATTMETER VB– screw terminals.

STEP 3: Connect up to 12AWG wire from the battery positive terminal to one of the BATTMETER VB+ screw terminals.

STEP 4: Connect your charge controller and/or load negative to one of the BATTMETER V– screw terminals.

STEP 5: Connect your charge controller and/or load positive to one of the BATTMETER V+ screw terminals.

Specifications

Current Range	+/- 20A
Current Accuracy	+/- 0.25A
Voltage Range	0-30VDC
Voltage Accuracy	+/- 0.2V
Self Consumption Current	<1mA
Meter Type	Analog, Self Zeroing
Wire Terminal Connections	9 Total (3 V+, 2 Battery +, 4 V-)
Wire Size (Maximum)	12AWG
Fuse	Internal, Glass Cartridge Replaceable 20A, SFE-20 or AGX-20 Type
Operating Temperature	-40 to +85°C (-40 to +185°F)
Operating Humidity	0% to 85% non condensing
Case – Color	Powder Coated Steel - Black
Size (L x W x H)	127 x 102 x 33mm (5 x 4 x 1.3”)
Weight	210g (7.5oz)

TECH CORNER

Additional Information you may find useful

1. **FUSE:** The BATTMETER has an internal 20A fuse. The type is AGX-20 or SFE-20 type. There is one screw in the top of the BATTMETER. Remove the screw and carefully separate the cover from the base. Replace the fuse as necessary.

2. **LIMITS:** Don't exceed 30V or 20A or the meters could be damaged.

3. **MOISTURE:** The BATTMETER is designed to be used indoors or outdoors in a weatherproof enclosure. Avoid getting the BATTMETER wet.

4. **METERS:** The meters used are self zero type. There is no zero adjustment provided on the meter pointer.

5. **CURRENT (AMPS)**: When connected properly to a battery and power source/load, if the current shown on the meter is positive, then the battery is charging and if the current is in the negative range, the battery is discharging.

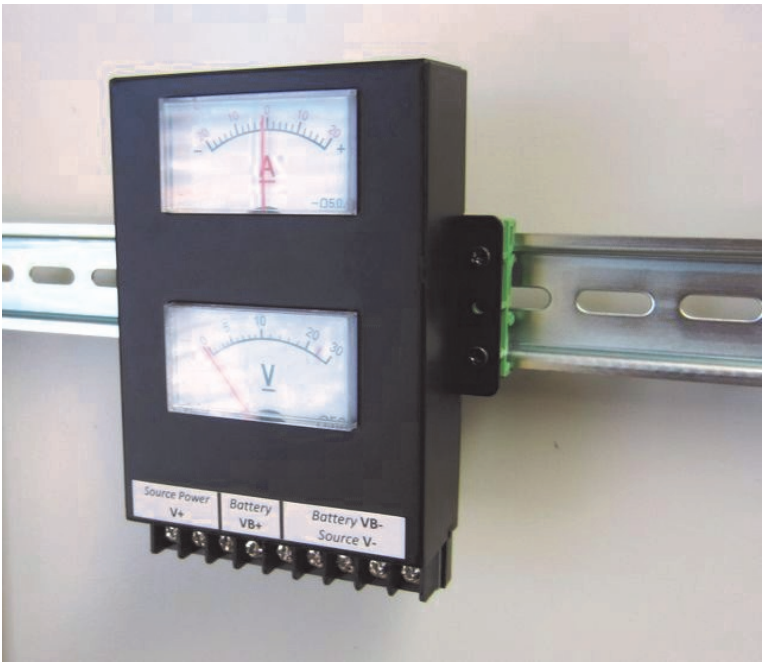
6. **BATTERY STATUS:** Read the Voltage Meter. Multiply value in chart x 2 for 24VDC battery systems**. NOTE: These state of charge voltage values are without any load on the battery. Disconnect any external load before measuring battery voltage and applying this chart. Battery voltage will rise substantially without load.**

State Of Charge	Sealed or Flooded Lead Acid	GEL Battery	AGM Battery
100%	12.7+Volts	12.9+Volts	12.8+Volts
75%	12.4 Volts	12.7 Volts	12.6 Volts
50%	12.2 Volts	12.4 Volts	12.3 Volts
25%	12.0 Volts	12.0 Volts	12.0 Volts
10%	11.8 Volts	11.8 Volts	11.8 Volts

7. **BATTERY LIFE:** To extend the life of your batteries try not to discharge more than 50% state of charge. Remember state of charge is measured without any load on battery except the BATTMETER.

8. **BACKUP TIME:** Measure negative current on the A meter. If your battery is a fully charged 100Ah battery and the current is –2A then that battery should last about 50hrs (hours = Ah / current). If discharge to 50% only then 50/2 = 25 hrs till 50% state of charge is reached.

9. **CHARGE TIME:** Charge time is similar. A 100Ah battery at 50% state of charge if charging with +2A should take about 25hrs to fully charge.



Limited Warranty

The BATTMETER products are supplied with a limited 24 month warranty which covers material and workmanship defects. This warranty does not cover the following:

- Parts requiring replacement due to improper installation, misuse, poor site conditions, faulty power, etc.
- Lightning or weather damage.
- Physical damage to the external & internal parts.
- Products that have been opened, altered, or defaced.
- Water damage for units that were not mounted according to user manual.
- Usage other than in accordance with instructions and the normal intended use.