



This diagram shows a method of using the TriMetric with systems with battery voltages above 60V. This will allow volts, amps and amp-hours to be measured. It will measure Volts, however you will have to multiply the volts by 10. For example, if the TriMetric reads 12.2 volts, this will mean 122 volts. (The input resistance from M+ to G1 is 152k ohms)

There is one problem with this method of connection--and that is that it causes a little more current draw from the bottom (i.e most negative batteries, since the TriMetric draws from 16-30 milliamperes from these. That means that these bottom batteries will get a little less charging current than the rest of the batteries (by this 16-32 milliamperes). This may slightly unbalance the batteries. This could be a problem for small systems, but may not be for a system for which 30 ma. is a negligible current. If you were to supply 12 volts or so from "G1" (-) to "+" using a small separate isolated small power supply you could avoid this problem.

More than 48 volt

Over 50 volts.

12-24V

1 Megohm resistor, 1% tolerance

365K, 1% resistor

Terminal block on TriMetric

G1
G2
SIG
+
M+

Output voltage to loads

SHUNT: 50 MV/500 AMP
OR 100 MV/100 AMP

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