Meter Installation Guidelines

Energy Tracking, LLC
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General:

To enable proper power and energy measurement, a meter needs to have connections to the voltage and current inputs for each phase. It appears to seem quite simple but, on the practical level this does not appear to be so. Therefore, the purpose of this document is to help ensure that proper connections to the metering equipment are done.

Common Mistakes:

The following are the common mistakes done during installation of a meter and associated current measurement transformers (CTs) inputs.

a. The voltage connections for the respective phases A, B & C (L1, L2, & L3) must match the voltage designated inputs to the meter. Each phase must be confirmed to ensure it matches the voltage measurement input to the meter.

b. The current transformer connections for the respective phases A, B & C must match the associated voltage phases to the meter. i.e.; Phase 'A' CT must be routed through the phase 'A' voltage conductor. Each phase must be confirmed to ensure it matches the current measurement input to the meter.

c. The current transformer(s) need to be oriented properly. Each current transformer will have either an arrow or orientation of the output secondary leads (X2, X1) that should point towards the load.

Ensuring Correct Wiring:

Download and install the 'Discover IP' software application from Energy Tracking's web site. You can find this application by clicking on the 'Download' link. This application will help identify the meter's IP Address so you can connect to it from your Internet Browser.

Once the IP Address is identified, log-in to the meter using an Internet Browser such as MS Internet Explorer.

Log-In to the Meter:

http://xxx.xxx.xxx.xxx

Energy Tracking

Web Enabled Meter (WEMM)

Log-In

You should see the page shown below. Click on the 'Log-In' link and an authentication pop-up dialog will appear.

User Name: eM200
Password: PW

Enter the default values above (case sensitive).

Post Log In:

Upon a successful log-in, you will see a menu to the left.

Home

Real Time Data 1

Real Time Data 2

Load Profile

Current Month

Last Month

Load Control

Setup

Click on 'Real Time Data 1':

With no voltage or current inputs connected, you should see this.

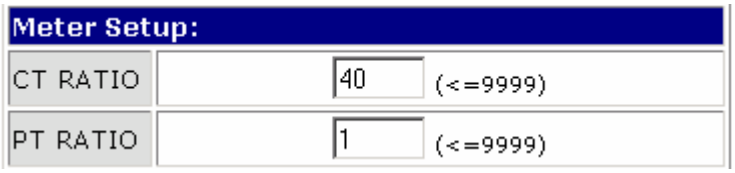
Energy Tracking - WEMM			
Phase	VOLTAGE	CURRENT	POWER FACTOR
PH_A:	0.000	0.000	1.000
PH_B:	0.000	0.000	1.000
PH_C:	0.000	0.000	1.000

Now, you can systematically connect each voltage phase and confirm its proper connection by clicking on the 'Real Time Data 1' link.

Next, systematically connect each current transformer input and check the reading by phase by clicking on the 'Real Time Data 1' link.

Note: If after connecting the CT, the Power Factor value is negative, then the CT is not oriented properly. The CT orientation must be reversed.

Finally, in order for the meter to measure the energy consumption, we must enter a CT Ratio. Click on 'Setup >> Main Configuration'. Identify the row shown below and enter the appropriate CT Ratio. For example: If the primary CT sizing is 200 Amps, then the CT Ratio = 200 / 5 = 40.



After clicking on the 'Submit' button, the meter will automatically reboot and apply the new CT ratio. This can be viewed by clicking on the link 'Real Time Data 2' where the CT ratio is applied.

The web page 'Real Time Data 1' does **not** apply the CT ratio.

Fuses must be installed on the voltage inputs.

A surge suppressor is strongly recommended on the 12VDC power supply.

Please email support@energytracking.com for further details.