TECHNICAL BRIEF

⊜ ENPHASE.

Configuring the ET WEM-MX & Enphase Envoy

Background

The purpose of this document is to provide guidance for commissioning the Enphase Envoy and Energy Tracking WEM-MX revenue grade meter, and to bring both devices online via a cellular router connection. This document can be used in conjunction with existing guides on Envoy commissioning as it relates to microinverter detection and communication.

A laptop computer will be required to communicate with the Envoy, Energy Tracking meter, and Cellular Router at the same time. In order to be able to communicate with both devices at the same time, an Ethernet Switch can be used. The Ethernet Switch may require a power source to operate.

Once the Envoy and Energy Tracking meter have been configured, the devices can be connected directly to LAN ports of the BR1 Mini cell router, and the Ethernet Switch can be removed. 4 short Etehrenet cables will be required to make the necessary connections for configuration. After the configuration has been completed, the Ethernet switch and 2 Ethernet cables can be removed for use in configuring the next site.

The image below provides an example of how the devices can be connected to allow for the configuration steps that follow in this document.
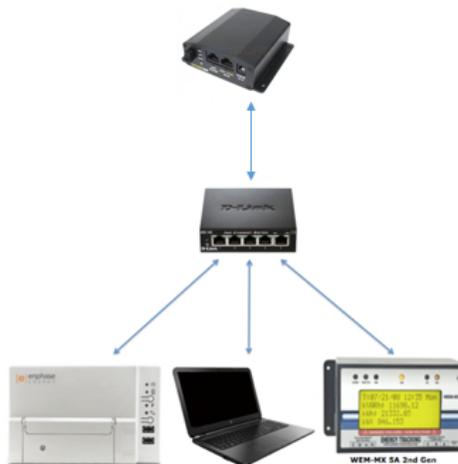
Pepwave BR1 Mini configuration

By inserting an activated SIM Card into the back of the BR1 Mini cell router, the router should automatically connect to the internet provided that there is an adequate cell signal in the installation location. Using a laptop computer the router's internet connection can be verified.

1. Insert SIM card into the back of the BR1 Mini cell router
2. Open an internet browser window
3. Enter 192.168.50.1 into the browser URL bar and press enter
    a. This should direct you to the router administration page
4. Enter the Username & Password:
    a. Username: default admin
    b. Password: admin
5. Verify that the WAN Connection Status reads '**Device Detected'**

Envoy configuration

In order for the WEM-MX to be able to report to the Envoy, the Envoy must first be instructed to accept reports from the meter. Ensure that the Envoy, WEM-MX and Laptop are connected to the same Ethernet Switch.

1. Open the Installer Toolkit App
2. Navigate to the **Network** tab on the bottom of the screen, then select **Ethernet**.
3. Select **Use Static IP**, and enter an **192.168.50.2** as the static IP address into the IP address field. Click **Update**

4. Navigate to the **Meters** tab on the bottom of the screen
5. If the Energy Tracking Meter is reporting on the same network, it should show by IP address on this screen
6. If multiple meters are present, ensure the appropriate meter is selected, then click **Add Selected Meters**

7. The meter will show as discovering until the Energy Tracking meter has been configured to forward metering reports to the Envoy's static IP address.

WEM-MX configuration

1. Open a new browser window and enter the IP address that is displayed on the WEM-MX meter LCD screen
2. When prompted for authentication, enter the following:
   a. User Name: eM200
   b. Password: PW
3. Click **Setup** on the left sidebar menu
4. Click **Main Configuration** in Setup Menu
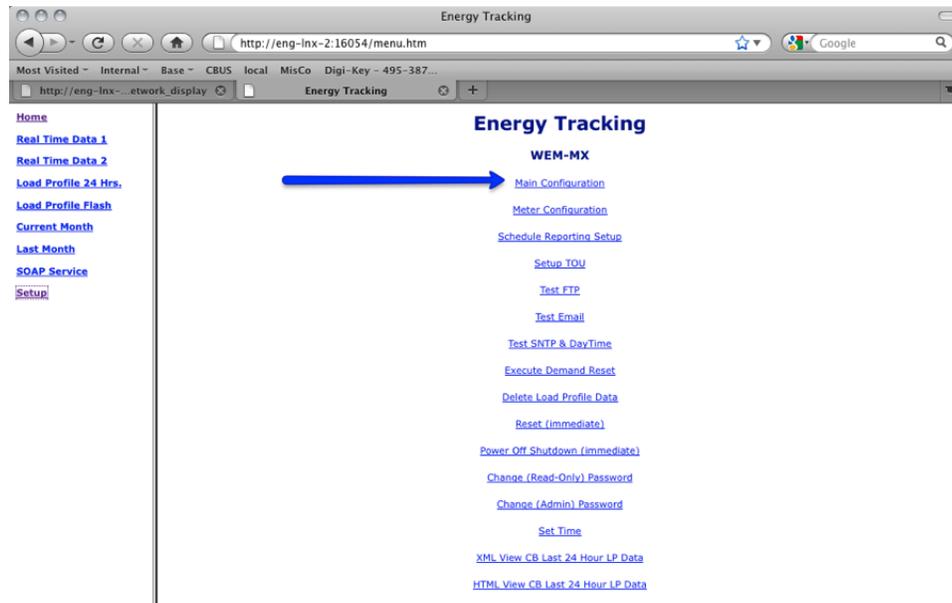
5. Fill in the following Main Configuration fields:
   a. Under *FTP Server IP* put in the IP address of the Envoy – **192.168.50.2**
   b. Under *FTP Account Name* enter: **energytracking**
   c. Under *FTP password* enter: **enphasepmu**
   d. Make sure to keep the FTP directory blank.
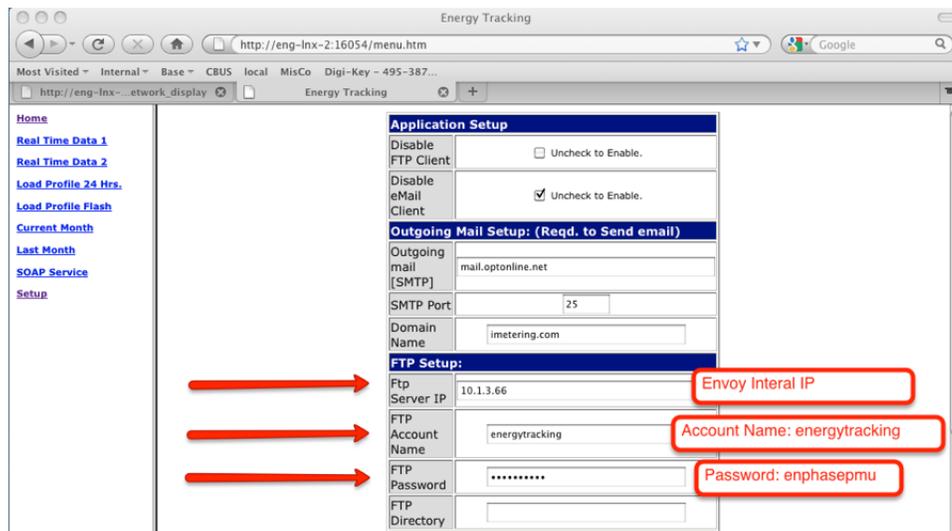
6. Configure the metering settings in accordance with provided documentation
7. Click **Setup** in the left sidebar menu, and select **Test FTP**
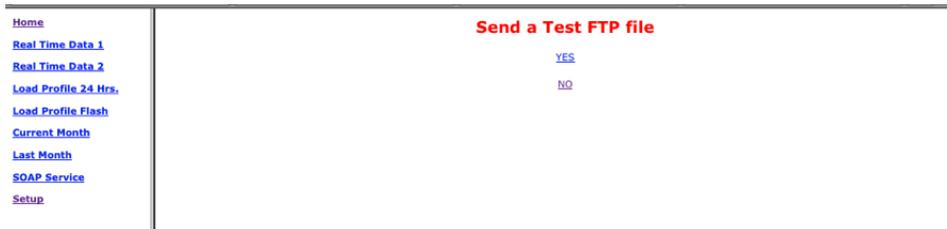
8. Click **Yes** on the Test FTP page. If configured properly the FTP Test should come back as successful

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Home
Real Time Data 1
Real Time Data 2
Load Profile 24 Hrs.
Load Profile Flash
Current Month
Last Month
SOAP Service
Setup

Energy Tracking

WEM-MX

Test FTP(Client) File Successful

Home

9. Once the FTP shows successful, verify that the meter is reporting on the meters tab of Installer Toolkit.

Next Steps

The WEM-MX meter is now configured to forward metering reports to the Envoy. The Envoy has also been configured to receive these reports and will forward these reports to Enlighten at the regular reporting intervals. Once configuration is complete, the Ethernet Switch can be removed, and the WEM-MX and Envoy can be plugged directly into the LAN ports of the Pepwave Mini BR1 router. The Ethernet switch and leptop can be removed.