Power Xpert Multi-Point PXMP-EPM-(M) Energy Portal Module

NOTICE
BEFORE INSTALLING THE PXMP-EPM ENERGY PORTAL MODULE, FIRST UPGRADE THE PXMP-MB METER BASE TO FIRMWARE 1.1.36 OR HIGHER. THE 1.0.10 FIRMWARE SHIPPED IN METER BASES PRODUCED IN JUNE 2014 OR EARLIER IS NOT FULLY COMPATIBLE WITH THE ENERGY PORTAL.

http://www.eaton.com/Eaton/ProductsServices/Electrical/ProductsandServices/PowerQualityandMonitoring/PowerXpertArchitecture/Updateyourmetercardfirmware/index.htm

NOTICE
PLEASE REFER TO THE PXMP USER MANUAL MN150001EN FOR COMPLETE PXMP SYSTEM DETAILS AND SPECIFICATIONS.

The PXMP-EPM Energy Portal Module is designed to be used with the PXMP-MB (AB) Meter Base plugging into module slot ten only. For configuration and application details please refer to the "PXMP Energy Portal Web Interface and User Manual" (document number MN150003EN).

The PXMP-EPM Energy Portal Module adds sophisticated Web enabled metering capability to the PXMP Meter. A typical application would be for storing the results of metering utilities (electric, gas, water, or steam) and for serving an apartment complex (tenant by tenant). Stored data for each tenant is then available over Ethernet with the support of an embedded JAVA Applet that is pre-loaded in the module.

The Energy Portal Module comes standard with a front facing Ethernet RJ-45 configuration port and a LAN/WAN RJ-45 Ethernet jack on the bottom end (See Figure 1). This module can also be ordered as PXMP-EPM-M which supports an internal dial up telephone modem with RJ11 connection at the bottom of the module for interface with remote billing software in applications where network connections are not possible or practical.

Once the Energy Portal Module is configured with an IP address, the JAVA Applet can be accessed over a LAN. Metering data can be viewed for each tenant, as well as an aggregated sum of the tenant meters. This feature allows for E-Allocation, or the limiting of energy consumption tenant by tenant.

A detailed product identification label is on the right side of all PXMP Energy Portal Modules. This information can be viewed through the PXMP-MB USB configuration port or the PXMP-EPM’s front Ethernet configuration port.

WARNING
BE SURE THAT ALL SYSTEM POWER IS OFF WHEN ASSEMBLING A PXMP METER INCLUDING THE INSTALLATION OF THE PXMP-EPM AND ITS ASSOCIATED EXTERNAL COMM. CIRCUITS.
To install a PXMP Energy Portal Module into the PXMP-MB:

1. Remove control power from PXMP-MB (-AB) PS Input Terminals 15, 16, and 17.
2. Remove PXMP-MB(-AB) slot 10 metal cover using a compatible Phillips head screw driver for the screws at top/bottom.
3. Remove the Energy Portal Module from its packing and remove the black plastic retainers from the mounting screws.
4. Insert the Energy Portal Module into PXMP-MB(-AB) by aligning the Energy Portal Module connectors and screw mounts with those of the PXMP-MB(-AB) and pushing.
5. Tighten the mounting screws until the Energy Portal Module is tight against the PXMP-MB(-AB).
6. Restore control power to PXMP-MB(-AB) PS Input Terminals 15, 16, and 17.

PXMP-EPM Energy Portal Module Specifications:
- PXMP-MB (-AB) Meter Base slot position ten only
- Housing NEMA 1, IP20 installed in Meter Base and cables inserted into connectors.
- Pollution Degree 2
- Operational Temperature range -20 to 70°C (-4 to 158°F)
- Storage Temperature range -45 to 85°C (-49 to 185°F)
- Elevation 0-9,849 ft. (0-3000 m)
- Humidity 5-95% noncondensing
- UL file # E185559, UL Standard UL61010-1
- CNL evaluation to CAN/C22.2 No 1010.1.92
- CE Mark
- EMC EN61326
- Emissions conducted and radiated as part of PXMP Meter System.
  - FCC Part 15 Class B
  - CISPR 11 Class B
  - CISPR 22 Class B
- Internal Memory 4GB NAND Flash
  - For Energy/Demand profiles, trending and general logs.
- Web Services
  - Admin password - Each PXMP-EPM comes with a unique Admin password. The eight digit password is printed on the label of the device.
  - Up to five simultaneous clients

Communication Ports:
- Configuration Ethernet RJ45 Cat5 STP/UTP
  - 10 Base T/100 Base Tx
  - Auto Cross-over Capability supported.
  - Java Web Browser interface
  - IP address 192.168.1.1 by default
- Bottom Facing LAN/WAN Ethernet Port
  - RJ45 Cat5 STP/UTP 10 Base T/100 Base Tx
  - STP required for full electromagnetic immunity
  - Auto cross-over capability supported.
  - Supports Modbus TCP and Java Web Browser interface
  - DHCP by default
- Bottom Facing Telephone Modem Interface
  - V.92 Modem
  - RJ11 field interface

User Interface/ Faceplate LED Indicators:
- Health ~ 0.5 Hz blink on/off, Green = normal (see MN150003EN/ PXMP Energy Portal Module User Manual for details).
- Status – Red Blink if there are unacknowledged events (see MN150003EN/PXMP Energy Portal Module User Manual for details).
- Local IP 192/10
  - LED Green on = 192.168.1.1 default
  - LED off = 10.1.1.1
- Front Facing Ethernet Config. Port Integral RJ45 LEDs
  - Link - Green On for Link Detect (Tx/Rx = Blink)
  - 10/100 M (Speed) – Green On = 100 M
- LED 4 stack for Optional bottom Modem port
  - Tx – Yellow on = Data Transmit
  - Rx – Green on = Data Receive
  - RI – Ring Indicator - Yellow = active
  - CD – Carrier Detect, - Green = Carrier Detected
- LED 4 stack for Bottom LAN Ethernet port
  - Link - Yellow On for Link Detect
    - (Tx/Rx Data packet = Blink)
  - 10/100 M Speed – Green ON = 100 M
  - DHCP- Yellow On = DHCP/ Fixed = Off
    - DHCP blinks yellow until address is established.
  - TX Active - Green On