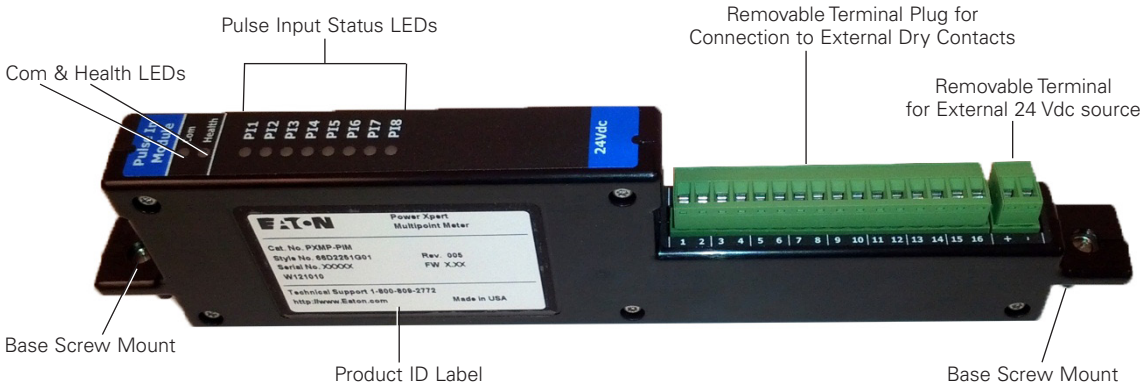
Power Xpert Multi-Point PXMP-PIM Pulse Input Module



For use with PXMP Power Xpert Multi-Point Meter.

⚠ NOTICE

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

The PXMP-PIM Pulse Input Module is designed to be used with the PXMP-MB (-AB) Meter Bases plugging into any of the 10 module slots. The Pulse Input Module supports monitoring of 8 dry contact pulse circuits from self-compensated gas, steam or similar energy related flow sensors. The pulses from these sensors can be scaled, monitored and trended by the PXMP meter along with electrical load data.

The Inputs can also be used to monitor the open/closed state of dry contacts. A typical application is to monitor breaker status contacts relevant to the metering system. The external circuits are wired through the 16 position removable terminal plug. Each input is electrically common to an external 24 Vdc power source. See Figures 1 & 2. Each Input circuit count can be monitored remotely over Modbus or recorded and trended by the PXMP meter application logic depending on configuration settings.

Each Pulse Input Module has the following LEDs

- Com Green LED – Meter/Base com. activity
- Health Green LED – normal = ~ 1Hz blink
- 1-8 Input Status Green LED indicators

A detailed product identification label is on the left side of all Pulse Input Modules, which may be obscured by adjacent modules once assembled into the Meter Base. This information can be viewed through the PXMP-MB configuration port.

⚠ WARNING

BE SURE THAT ALL SYSTEM POWER IS OFF WHEN ASSEMBLING A PXMP METER INCLUDING THE INSTALLATION OF THE PXMP-PIM AND ITS ASSOCIATED EXTERNAL INPUT CIRCUITS.

To install a Pulse Input Module into the Meter Base, first remove the metal slot cover on the Base using a compatible Phillips head screw driver for the screws at top/bottom. Remove the Pulse Input Module from packing and remove the black plastic retainers from the mounting screws. Align the Module connectors and screw mounts with those of the Meter Base. Then push the Module into the Base and tighten down the mounting screws until the module housing is tight against the backplane.

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Power Xpert Multi-Point PXMP-PIM Pulse Input Module

PXMP-PIM Pulse Input Module Specifications:

- PXMP-MB(-AB) Meter Base slot positions 1-10
- Each Pulse Input Module Monitors 8 electrically common dry contacts.
  - No Circuit to Circuit isolation.
  - Group isolation to ground 300 V, Limited by TVS Diode to Ground
- Circuit rating 24 Vdc +/- 10% (externally sourced)
  - Input impedance ~ 2.2 K pulling ~10m A per input if contact closed.
- External 24 Vdc source interfaces through 2 position Terminal Plug supporting wire sizes of 12-18 AWG (wire ferrules recommended).
- 24 Vdc should come from a dedicated local source for PXMP use only. Do not connect to CAT III bus.
- Maximum pulse rate is 20 Hz.
- Minimum pulse width is 20 mSec.
- External Pulse Input circuits are wired through a removable 16 position terminal plug supporting wire sizes of 12-18 AWG (wire ferrules recommended).
- Input Status to Application 1-6.0 Sec.
- Housing NEMA 1, IP20 installed in PXMP Meter Base and cables inserted into connectors.
- Pollution Degree 2
- Operational temperature range -20°C to 70°C (-4 to 158°F)
- Storage temperature range -45°C to 85°C (-49 to 185°F)
- Elevation 0-9,849 ft. (0-3000 m),
- Humidity 5-95% noncondensing
- CE mark
- UL file # E185559, UL Standard UL61010-1
- CNL evaluation to CAN/C22.2 No 1010.1.92
- EMC EN61326
- Emissions conducted and radiated as part of PXMP meter system.
  - FCC part 15 class B
  - CISPR 11 class B

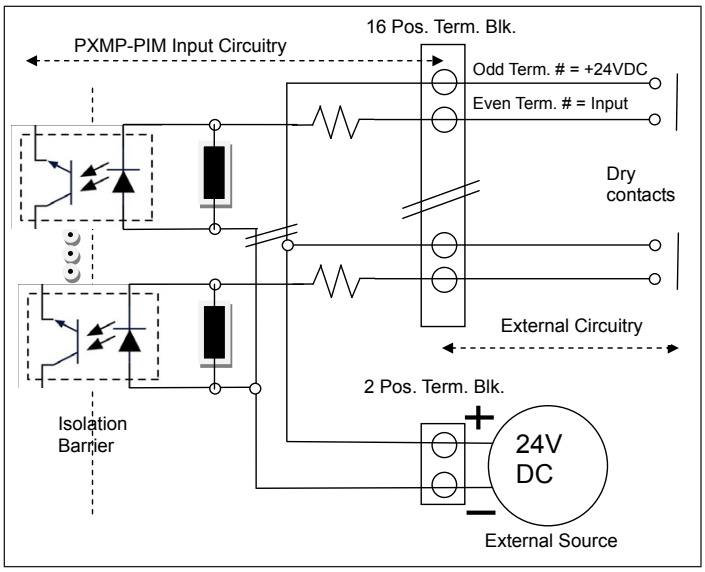

Figure 1. PXMP-PIM Pulse Input Circuitry.

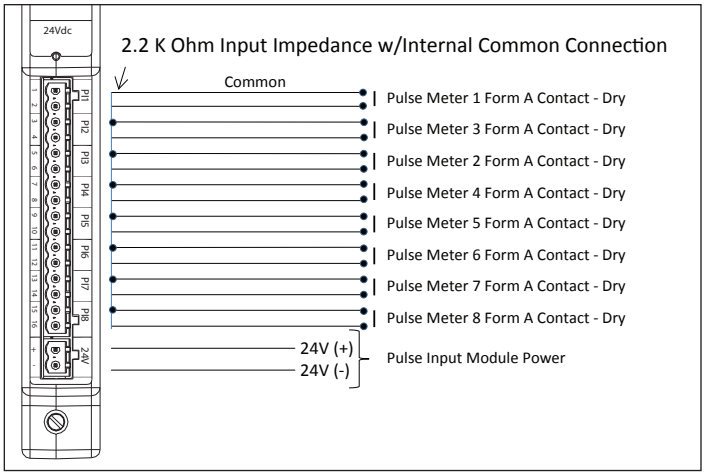

Figure 2. PXMP-PIM Pulse Input Module Connections.

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