

# Power Xpert® Multi-Point PXMP-IM333MV Generic 333 mV Current Sensor Interface Modules

**PXMP-IM333MV** – For use with current sensors with 333 mV maximum secondaries.

**For use with:**

- **PXMP Meter**; Power Xpert Multi-Point Meter
- **PXMP-MM333MV**; 333 mV Meter Modules
- **PXMP-SCXX/SCEXX**; Sensor Cables
- **Generic 333 mV Current Sensor**

**Note:** All Current Sensor/Transformers used on PXMP meter must be Double /Reinforced insulated 600V CATIII

The **PXMP-IM333MV** Interface Modules provide a means to use generic current sensors with a maximum secondary output of 333 mV in a PXMP Meter System.

The module provides:

- Termination and strain relieve of current sensor secondary wires;
- CT identification and tamper detection;
- Sensor Locator Indicator;
- Conversion to PXMP-SCX cables; and
- 600 V rated assembly for use in proximity with load cables (clearance must still be maintained as per applicable safety standards).

**Specifications**

600 V insulation

Temp. rating -20 - 70°C (-4 - 158°F)

Terminal block max. 14 AWG (208 mm<sup>2</sup>) wire

UL File # E185559

UL61010-1

3.06 (77.72) L x 0.77 (19.56) H x 1.82 (46.23) W

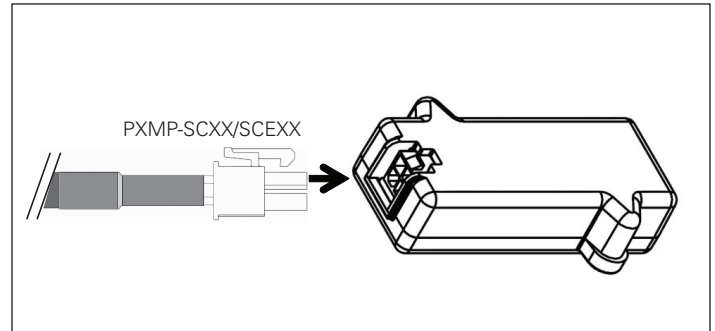


Figure 1. Interface Module Top.

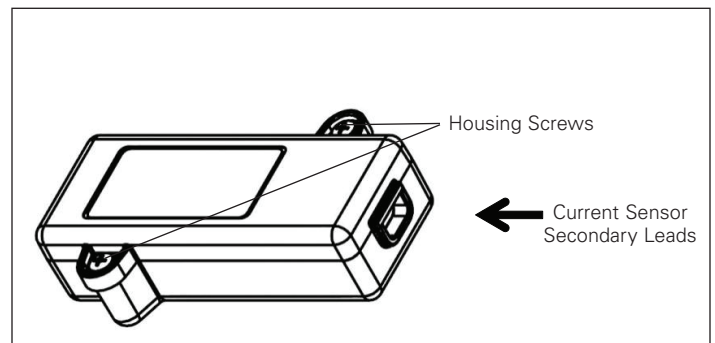


Figure 2. Interface Module Bottom View.

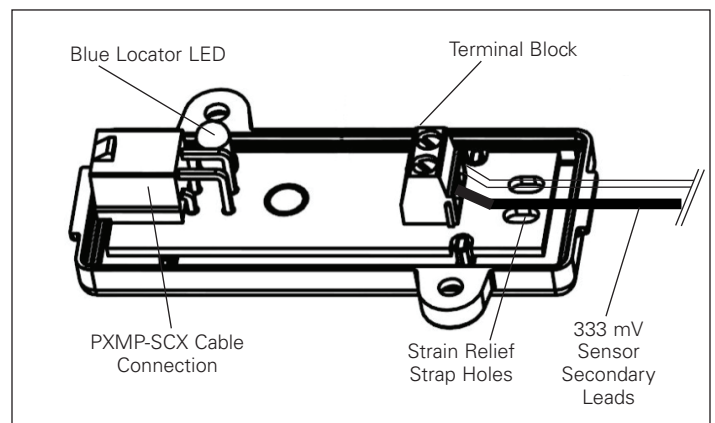


Figure 3. Open Interface Module.

**Assembly Instructions**

**⚠ WARNING**

**ENSURE THAT LOAD POWER IS OFF WHEN ASSEMBLING THE PXMP INTERFACE MODULES.**

The PXMP Interface Module should be opened by removing the two Philips screws from either side of the housing and pulling the two halves apart. Within the module is a printed circuit board assembly with a green terminal block to receive the leads from the current sensor while the other end supports a white 2x2 square 4-pin mating plug that will receive the PXMP-SCX/SCEX cable.

Consider in the enclosure assembly where this PXMP Interface Module will be located. The CT secondary wires should be cut to the desired length, stripped, and terminated at the terminal block on the adapter module. Match the color coding Black/White of these wire connections to the markings on the pcb assembly to set proper load phase direction.

**Note:** The 333 mV Black/White wires do not present an open circuit hazard when disconnected under load. This is due to the fact the current sensor burden resistor is located inside the sensor.

Typically, current sensor wires secondary output wires are color coded Black/White to indicate Start/Finish winding relationship in harmony with a load direction indication on the sensor assembly. If the Meter Module Load Power LEDs show inversion, then you will have to reverse these connections. Tighten the terminal screws to 0.5 - 0.6 Nm (4.3 – 5.4 lb-in.). A strain relief strap from the kit should be looped through the interface board and around the CT wires, pulling them tight to the board as shown (see Figure 3). Cut off the excess pull strap end with a diagonal cutter.

**Note:** When the excess is cut from the relief strap, it may result in a sharp edge on the strap. During reassembly, make sure the strap will not contact any wires within the Interface Module

The pcb assembly should be located on the lower cover half over the round boss. The top cover should be placed on top and the assembly screwed together to secure the assembly.

This assembly now will accept the PXMP-SCX cables with the other end plugging into the PXMP-MM333MV Meter Module. Identification circuitry on the interface module will tell the meter that you have connected a generic 333 mV current sensor but it will not know the turns ratio or any calibration data. See the PXMP User manual (MN150001EN) and the PXMP Configuration Software Manual (MN150002EN) for details.

**Locator Circuit**

With so many possible current sensor connections on the PXMP meter (60 max.), it can be an effort to insure that the intended load is properly referenced to the desired meter circuit. The traditional use of wire markers in combination to a system wiring diagram is encouraged. However, if an error is made, checking wire markers can take a lot of time.

The Eaton PXMP Meter has a special commissioning mode to help simplify this effort. The top clear cover of the PXMP Interface Module allows the Blue Locator LED to illuminate the Interface Module as part of this commissioning mode paired with the Reverse/Forward power LEDs for the specific circuit the cable is plugged into on the PXMP-MM333MV Meter Module. Individual pairs of LEDs can be energized one at a time using the PXMP Configuration Software.

**Related Products for the PXMP Meter:**

**PXMP-IM100MA-** Interface Module for Generic 100 mA max. secondary current loop type current sensors with identification, locator, and open circuit clamp circuit with alarm.

**PXMP-CS125/-CS250/-CS400-** Solid Core 100 mA current sensors with identification, locator, and open cable clamp circuits integrated.

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