

# PARTICULATE MATTER TRANSMITTER

## PM 2.5/10 Transmitter/Controller



Wall mount



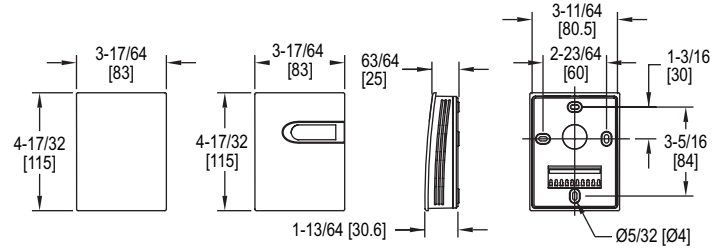
Wall mount with LCD



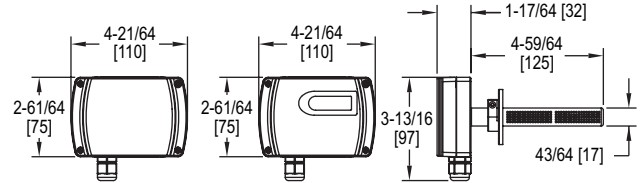
Duct mount



Duct mount with LCD



Wall mount



Duct mount

The **Series PMI Particulate Matter Transmitter** is designed to measure indoor air quality by detecting particulate matter in an office environment or HVAC duct. Using laser scattering technology, the Series PMI can measure particles as small as 0.3 µm, making it an essential component of any indoor air quality monitoring system. The optional relay combined with the settable alarm and control parameters allow the Series PMI to be a stand-alone controller.

**BENEFITS/FEATURES**

- Maintains healthy air supply with long term stability and accuracy
- Particulate matter application independent as duct and wall mount units are available
- Low maintenance with 10 years of service life in auto mode
- Minimal downtime with overvoltage protection
- Easy setup with optional integral display and buttons
- Saves time using removable terminal block on duct mount model
- Single unit controller with alarm, control modes, and optional relay

**APPLICATIONS**

- Educational institutions
- Healthcare facilities
- Corporate offices
- Hotels/restaurants
- Air purifiers

**SPECIFICATIONS**

**Sensor:** Laser scattering.  
**Range:** PMI-2.5: 0-500 µg/m<sup>3</sup>, particle size 0.3-2.5 µm; PMI-10: 0-600 µg/m<sup>3</sup>, particle size 0.3-10 µm.  
**Accuracy:** ±10 µg/m<sup>3</sup> @ 0-100 µg/m<sup>3</sup>; ±10% reading @ 100-600 µg/m<sup>3</sup> @ 25°C, 50% RH.  
**Resolution:** 1 µg/m<sup>3</sup>.  
**Response Time:** <10 s, continuous service mode.  
**Temperature Limits:** Operating: 32 to 122°F (0 to 50°C); Storage: -22 to 158°F (-30 to 70°C).  
**Humidity Limits:** 0-95% RH (non-condensing).  
**Power Requirements:** 16-28 VAC/6-35 VDC.  
**Load Resistance:** Current output: ≤500 Ω; Voltage output: ≥2 kΩ.  
**Output:** Current: 4-20 mA; Voltage: 0-10 VDC; Relay: SPST 3A, 30 VDC/250 VAC; RS-485/Modbus® (RTU).  
**Service Life:** MTBF more than 3 years in continuous service mode, service life up to 8-10 years in auto (intermittent) service mode.  
**Display:** Optional 4-digit LCD.  
**Housing Materials:** Wall mount: Polycarbonate (UL 94 V-0); Duct mount: ABS and polycarbonate (UL 94 V-0).  
**Enclosure Rating:** Wall mount: IP30; Duct mount: IP65 (housing), IP30 (probe).  
**Weight:** Wall mount: 7.05 oz (200 g); Duct mount: 9.5 oz (270 g).  
**Compliance:** CE, UKCA.

MODEL CHART						
Model	Particulate Size	Mounting	Output	Relay	LCD Display	Buttons
PMI-2.5WC-N-N	PM 2.5	Wall mount	Modbus®, 4-20 mA, 0-10 V	No	No	No
PMI-2.5WC-N-LCD	PM 2.5	Wall mount	Modbus®, 4-20 mA, 0-10 V	No	Yes	No
PMI-10WC-N-N	PM 10	Wall mount	Modbus®, 4-20 mA, 0-10 V	No	No	No
PMI-10WC-N-LCD	PM 10	Wall mount	Modbus®, 4-20 mA, 0-10 V	No	Yes	No
PMI-2.5DC-N-N	PM 2.5	Duct mount	Modbus®, 4-20 mA, 0-10 V	No	No	No
PMI-10DC-N-N	PM 10	Duct mount	Modbus®, 4-20 mA, 0-10 V	No	No	No
PMI-2.5WC-RLY-LCD	PM 2.5	Wall mount	Modbus®, 4-20 mA, 0-10 V	Yes	Yes	No
PMI-10WC-RLY-LCD	PM 10	Wall mount	Modbus®, 4-20 mA, 0-10 V	Yes	Yes	No
PMI-2.5WC-RLY-B	PM 2.5	Wall mount	Modbus®, 4-20 mA, 0-10 V	Yes	Yes	Yes
PMI-10WC-RLY-B	PM 10	Wall mount	Modbus®, 4-20 mA, 0-10 V	Yes	Yes	Yes
PMI-2.5WA-RLY-B	PM 2.5	Wall mount	4-20 mA, 0-10 V	Yes	Yes	Yes
PMI-10WA-RLY-B	PM 10	Wall mount	4-20 mA, 0-10 V	Yes	Yes	Yes
PMI-2.5WC-RLY-N	PM 2.5	Wall mount	Modbus®, 4-20 mA, 0-10 V	Yes	No	No
PMI-10WC-RLY-N	PM 10	Wall mount	Modbus®, 4-20 mA, 0-10 V	Yes	No	No
PMI-2.5WA-N-LCD	PM 2.5	Wall mount	4-20 mA, 0-10 V	No	Yes	No
PMI-10WA-N-LCD	PM 10	Wall mount	4-20 mA, 0-10 V	No	Yes	No
PMI-2.5WA-N-N	PM 2.5	Wall mount	4-20 mA, 0-10 V	No	No	No
PMI-10WA-N-N	PM 10	Wall mount	4-20 mA, 0-10 V	No	No	No
PMI-2.5WA-N-B	PM 2.5	Wall mount	4-20 mA, 0-10 V	No	Yes	Yes
PMI-10WA-N-B	PM 10	Wall mount	4-20 mA, 0-10 V	No	Yes	Yes
PMI-2.5WC-N-B	PM 2.5	Wall mount	Modbus®, 4-20 mA, 0-10 V	No	Yes	Yes
PMI-10WC-N-B	PM 10	Wall mount	Modbus®, 4-20 mA, 0-10 V	No	Yes	Yes
PMI-2.5DA-N-N	PM 2.5	Duct mount	4-20 mA, 0-10 V	No	No	No
PMI-10DA-N-N	PM 10	Duct mount	4-20 mA, 0-10 V	No	No	No
PMI-2.5DA-N-LCD	PM 2.5	Duct mount	4-20 mA, 0-10 V	No	Yes	No
PMI-10DA-N-LCD	PM 10	Duct mount	4-20 mA, 0-10 V	No	Yes	No
PMI-2.5DC-N-LCD	PM 2.5	Duct mount	Modbus®, 4-20 mA, 0-10 V	No	Yes	No
PMI-10DC-N-LCD	PM 10	Duct mount	Modbus®, 4-20 mA, 0-10 V	No	Yes	No