The PMS Particulate Sensor employs a field-proven combination of passive-induction and protected-probe technologies. As particles flow near and around the probe, minute currents are dynamically induced into the probe by flowing particulate. A DSP processes the signal into an absolute output that is reasonably linear to mass. Protective layers over the probe work in combination with induction-sensing to ensure reliable operation with all types of particulate including moist powders and highly conductive dusts. Maintenance is minimal and there is no need for an air purge. For durability, the sensors are passive and free of electronics. The PMS Particulate Sensor is designed to be used with the DPM Particle Monitor in order to be intrinsically safe.

**PMS Particulate Sensor**
- More effective control than "broken bag detectors".
- Protect downstream blowers, oxidizers, HEPAs, etc.
- For baghouses, cartridge filters, bin vents, and cyclones.
- Repeatable in all applications (conductive and moist dusts).

### SPECIFICATIONS

**Service:** Air and compatible gases, any type particulate.

**Wetted Materials:**
- T1 and T2: 316SS and PFA; T3 and T4: 316SS and ceramic.

**Minimum Detection:** 5.0 pA.

**Temperature Limits:**
- Ambient: Maximum -40 to 392°F (-40 to 200°C) (max must be calculated for each application);
- Process: See model chart.

**Pressure Limits:**
- Standard: Full vacuum to 10 psi (0.69 bar);
- Optional: 100 psi (6.89 bar).

**Output Signal:** pA.

**Electrical Connection:** Low noise coaxial.

**Process Connection:** See model chart.

**Enclosure:**
- Standard: Painted cast aluminum, weatherproof, NEMA 4X (IP66);
- Optional: Intrinsically safe, CSA (must use with proper DPM model).

**Weight:** Varies depending on length of probe and type of mount.

**Agency Approvals:** CE, CSA

### How To Order:
Determine model number from model chart using example as a guide. Select desired length of Particulate Sensor cable from cable model chart.

<table>
<thead>
<tr>
<th>Example</th>
<th>PMS</th>
<th>A1</th>
<th>T1</th>
<th>P1</th>
<th>L1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series Designator</td>
<td>PMS</td>
<td>PMS Particulate Sensor</td>
<td>Weatherproof, NEMA 4X (IP66)</td>
<td>Intrinsically Safe, CSA &amp; CEA Approvals, Class I, II, and III. Division I &amp; II, All Groups, NEMA 4X (requires Quick Clamp connection or flange mount)</td>
<td></td>
</tr>
<tr>
<td>Enclosure Rating</td>
<td>A1 AHZ1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process Connection</td>
<td>1/2&quot; NPT</td>
<td>1&quot; NPT with 1.5&quot; Quick Clamp Connection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2&quot; 150# ANSI Flange</td>
<td>2&quot; 150# ANSI Flange with Process Mating Flange and Installation Kit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Process Temperature</td>
<td>P1</td>
<td>250°F (121°C)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>450°F (232°C)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>T3</td>
<td>800°F (426°C) - requires flange mount</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>T4</td>
<td>1200°F (649°C) - requires flange mount</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Process Pressure</td>
<td>P2</td>
<td>10 psi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 psi - requires flange mount</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Insertion Length** (Recommended at Least 1/2 Duct Diameter)
- L1.5: 1.5" Probe
- L03: 3" Probe
- L05: 5" Probe
- L10: 10" Probe
- L15: 15" Probe
- L20: 20" Probe
- L30: 30" Probe
- L36: 36" Probe
- L48: 48" Probe
- L60: 60" Probe
- L72: 72" Probe

### Model Description
- CAB-10: 10 foot sensor cable
- CAB-20: 20 foot sensor cable
- CAB-30: 30 foot sensor cable
- CAB-40: 40 foot sensor cable

Consult factory for custom cable lengths up to 300 feet.