The PX2780 high accuracy barometric pressure transducers are designed for applications in industry and science where accuracy, fast dynamic response and long term stability are important. The sensor and electronics are packaged in a rugged stainless steel and polyester case. A removable 5-pin terminal strip makes fast and secure connections. A high accuracy ceramic sensor is coupled with a digital compensation circuit using a custom ASIC to assure consistent accuracy and reliability over a broad range of environmental conditions. There is also a sleep mode where the unit only draws 1 micro amp that allows almost instant turn on/reading for remote applications.

**Applications**
- Environmental Monitoring Systems
- Weather Measurement Systems
- Environmental Data Logging
- Laboratory and Test Station Monitoring

**SPECIFICATIONS**

- **Accuracy:** See table on next page
- **Resolution:** 0.1 hPa (mb)
- **Long Term Stability:** ±0.1 hPa (mb)/year
- **Warm-Up Time:** <1 second
- **Warm-Up Shift:** <0.1 hPa (mb) maximum
- **Response Time:** <100 ms
- **Proof Pressure:** 1500 hPa (mb)
- **Burst Pressure:** 2000 hPa (mb)
- **Storage Temperature:** -60 to 120°C (-76 to 248°F)
- **Operating Temperature:** -40 to 60°C (-40 to 140°F)
- **Compensated Range:** -40 to 60°C (-40 to 140°F)
- **Zero Shift:**
  - Barometric: ±0.18% full scale/50°C (±0.2% full scale/100°F)
  - Sensitivity Effects: ±0.09% full scale/50°C (±0.1% full scale/100°F)
- **Excitation:** 9.5 to 28 Vdc (3 mA operate mode, 1 µA sleep mode)
- **Output:** 0 to 5 Vdc
- **Full Scale Span Setting:** ±5 mV
- **Zero Setting:** ±5 mV
- **Output Impedance:** <10 Ω
- **Electrical Connection:** Removable 5-pin terminal strip
- **Pressure Connection:** ½” barbed fitting
- **Pressure Media:** Non-condensing air or gas
- **Weight:** 137 g (4.8 oz)
- **Mounting:** Mounting plate
BARBED PRESSURE FITTING
CONNECTOR, 5 POSITION
BL 3.5 SCREW CLAMP

Dimensions: mm (inch)
Ø = diameter

**ACCURACY [hPa (mbar)] RSS**

<table>
<thead>
<tr>
<th>TEMPERATURE</th>
<th>RANGE (hPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>500</td>
</tr>
<tr>
<td>20°C (68°F)</td>
<td>±0.6</td>
</tr>
<tr>
<td>0 to 40°C (32 to 104°F)</td>
<td>±1.2</td>
</tr>
<tr>
<td>-20 to 50°C (-4 to 122°F)</td>
<td>±2.0</td>
</tr>
<tr>
<td>-40 to 60°C (-40 to 140°F)</td>
<td>±2.5</td>
</tr>
<tr>
<td>Non-linearity</td>
<td>±0.5</td>
</tr>
<tr>
<td>Hysteresis</td>
<td>±0.06</td>
</tr>
<tr>
<td>Non-repeatability</td>
<td>±0.04</td>
</tr>
</tbody>
</table>

* RSS of end point non-linearity, hysteresis, non-repeatability and calibration uncertainty

**To Order**

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>BAROMETRIC RANGES (ABSOLUTE PRESSURE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PX2780-500B5V</td>
<td>500 to 1100 hPa (mb)</td>
</tr>
<tr>
<td>PX2780-600B5V</td>
<td>600 to 1100 hPa (mb)</td>
</tr>
<tr>
<td>PX2780-600NB5V</td>
<td>600 to 1060 hPa (mb)</td>
</tr>
<tr>
<td>PX2780-800B5V</td>
<td>800 to 1100 hPa (mb)</td>
</tr>
<tr>
<td>PX2780-800NB5V</td>
<td>800 to 1060 hPa (mb)</td>
</tr>
</tbody>
</table>

Comes complete with NIST traceable calibration certificate and operator’s manual.

Ordering Examples: PX2780-800B5V, high accuracy barometric transmitter with 0 to 5 Vdc output, range 500 to 1100 hPa (mb).
PX2780-600NB5V, high accuracy barometric transmitter with 0 to 5 Vdc output, range 600 to 1060 hPa (mb).