PendoTECH Single Use Temperature Monitor/Transmitter Panel Mount Instructions

1. Introduction
The PendoTECH Temperature Monitor/Transmitter allows users to obtain inline temperature measurements with PendoTECH single use temperature sensors. The PendoTECH Temperature sensor/transmitter is available as a standalone bench top unit or in a panel mount model. When integrating the PendoTECH monitor into an electrical cabinet it is imperative to have the proper configuration in order to allow connection cables to pass through the enclosure. The following technical note describes how to properly mount a PendoTECH Temperature monitor to ensure accurate and reliable measurements.

2. Specifications
Temperature sensor/transmitter specifications are as follows (also found on product data sheet):

<table>
<thead>
<tr>
<th>Specification</th>
<th>Hosebarb</th>
<th>Luer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>Better than +/- 0.2 C</td>
<td>Better than +/- 0.4 C</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>0 to 70 C</td>
<td>0 to 70 C</td>
</tr>
<tr>
<td>Resistance @ 25 C</td>
<td>2252 Ohm</td>
<td></td>
</tr>
<tr>
<td>Pressure Range</td>
<td>Up to 75 PSI</td>
<td></td>
</tr>
<tr>
<td>Monitor Cable</td>
<td>Hosebarb: 10 feet with ¼” headphone plug to connect to monitor receptacle</td>
<td>Luer: 7 feet with ¼” headphone plug to connect to monitor receptacle</td>
</tr>
<tr>
<td>Transmitter Output</td>
<td>4 – 20 mA analog signal</td>
<td></td>
</tr>
</tbody>
</table>

3. Ordering Information
There are two versions of the PendoTECH Photometer available. A standalone benchtop unit and a panel mount version for integration into an electrical cabinet or skid. Ordering information for both units can be found below.

1. Benchtop/Panel Mount options
   - PDKT-TT1 = benchtop model
   - TT1-DR
     i. Temperature monitor/transmitter with din rail mounting kit
2. Cable options when going through cable gland. Ordered when not using panel mount connector highlighted below.
   - PDKT-650-TEMPB
     i. 10-foot reusable cable with ¼” phone jack terminal for hosebarb sensors.
   - PDKT-650-TEMPL
     i. 7-foot reusable cable with ¼” phone jack terminal for luer sensors.
3. Panel Mount Connector
   - PDKT-TEMPB-PNL
     i. PendoTECH 12-inch reusable cable with M8 (3 pin female) termination for hosebarb sensors.
        Note: This cable is only for hosebarb sensors, not compatible with luer sensors.
     ii. MC-7138K24
        i. Male receptacle with 12 inches of wire for PDKT-TEMPB-PNL.
4. Din rail mount kit
   - TT1-DR
     i. PendoTECH temperature sensor transmitter din rail mount kit
4. Wiring Information
The following sections describe the proper wiring configuration for the PendoTECH Temperature Monitor/Transmitter. This is only relevant when using PDKT-TEMPB-PNL. When using part numbers listed in 3.2 a hole must be drilled in the exterior panel wall in order to pass cables through enclosure.

4.1 PDKT-TEMPB-PNL
As customized systems with single use sensors become increasingly common, PendoTECH has developed an ideal solution to connect a PendoTECH single use temperature sensor to a control panel. The sensor comes standard with an overmolded connector to cut down on sensors cost. The PDKT-TEMPB-PNL cable has the receptacle on one end and an industry standard panel mount connector on the other end. The full wiring diagram for the receptacle wire leads can be found below.

![Wiring Diagram](image)

Connect black to pin 4 and brown to pin 5 as shown below.

![Detailed Wiring Diagram](image)

5. Mounting Instructions
The PendoTECH monitor/transmitter can be purchased with a din rail mounting kit. Ordering information can be found in section 3. Using the approach described in section 4, the monitor can be mounted on any convenient din rail within the electrical cabinet. The output from the monitor/transmitter is a 4-20 mA signal scales from 0 to 70 degrees Celsius.