

TEMPERATURE INDICATOR WITH DUAL RELAYS

8080PR

- INPUT THERMOCOUPLE AND RTD
- 3½ DIGIT LCD DISPLAY IN DEGREE C OR F
- RUGGED NEMA4X ENCLOSURE
- CHOICE OF ALUMINUM OR SS316 ENCLOSURE
- EXPLOSION PROOF CERTIFIED
- 3 YEAR WARRANTY



**Introduction**

IME Model 8080PR allows 2 independent alarms to be assigned over the temperature range of the sensor. The unit will accept an input from a Pt100 RTD or Type J or K thermocouple and provide an indication on a bright 4 digit LED. The unit serves a dual purpose since in addition to local indication of temperature, which is switch selectable to read °F or °C, it also serves as an accurate and repeatable temperature switch.

**Description**

IME Model 8080PR Temperature Indicators are designed for use in process industries where vibration, inclement weather and corrosive atmospheres prevail. The electronics are enclosed in a low copper epoxy coated Aluminum housing. For more aggressive environments, a SS316 housing is also available. The housings meet the requirements of NEMA 4X, and are also certified Explosion Proof by FM/CSA.

**LED Meter**

The Model 8080PR has a 4 digit LED display and may be configured to read -999 to 9999. The decimal point location, choice of °C or °F, alarm settings etc can be adjusted via the Remote Controller. This feature allows the unit to be re-ranged in the field through the safety glass window, without even opening the cover of the instrument.

**Mounting**

IME Model 8080PR can be wall mounted or mounted on a 2" pipe using mounting brackets

**Functional Specifications**

**Indication Accuracy**

0.1% of Calibrated range +/- 1 digit

**Set Point Adjustment**

10~100% of full scale, user selectable

**Reset**

Automatically when the input falls below the alarm set point by approximately +/- 0.5% of full scale.

**Alarm Set Point Accuracy**

+/-0.5% of full scale.

**Alarm Status Indication**

LED on front panel

**Display Height**

12.5mm (1/2") high

**Alarm Output**

2 sets SPDT, 1 from C, rated 10A @ 250V AC, 50/60Hz

**Stability Over Time**

0.1% of calibrated range +/- 1 digit over 6 months

**Over Range Indication**

Flashing of display

**Response Time**

Typically 75ms

**Supply Voltage**

18~28V DC

**Operating Temperature**

-50~70°C

**Weight**

0.9Kg (2Lb) for Aluminum Unit and 1.4Kg (3Lb) for SS316 unit

**Material of Construction**

Enclosure Epoxy painted Low Copper Aluminum or SS316 as specified

**O Rings**

Buna N

**Optional Accessories**

Mounting Brackets (IME Model 175PM, 175RC, 175NR, 175MM)

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Both the Aluminum and the SS316 housing are certified NEMA4X. As indicated below. IME model 8080PR can be optionally provided with certification and a stainless steel name plate for use in Hazardous Area applications.

FM/CSA EX PROOF CERTIFICATIONS

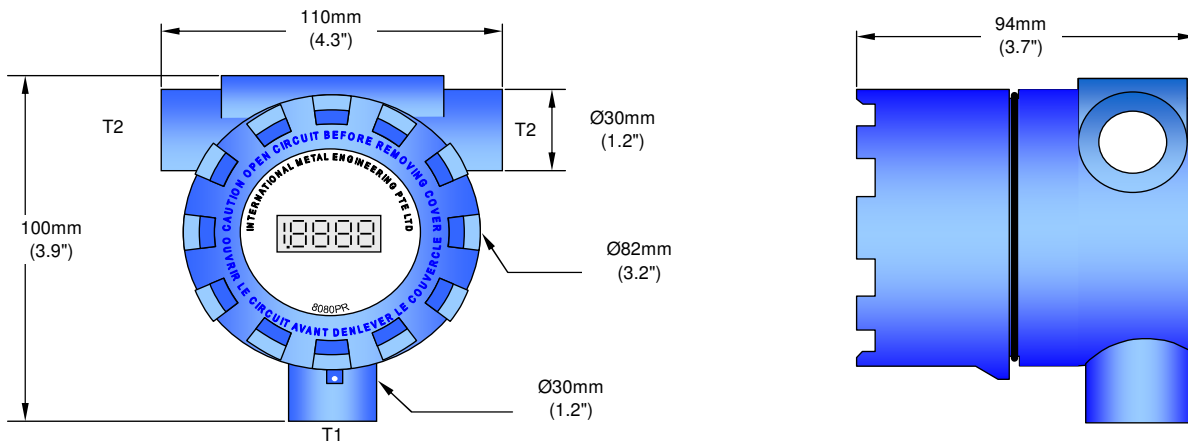
Class I Div I Groups B, C and D  
Class II Div I Groups E, F and G

Ordering Information

Model	Description																																																																																	
8080PR	Field Mounted Temperature Indicator with Dual Relays																																																																																	
	<table border="1"> <thead> <tr> <th>Code</th> <th>Options, Housing</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Die cast Aluminum, Epoxy Coated</td> </tr> <tr> <td>T</td> <td>SS316, Electro Polished</td> </tr> <tr> <th>Code</th> <th>Instrument Connection (T1)</th> <th>Conduit Size (T2)</th> </tr> <tr> <td>01</td> <td>M16 x 2P (for mounting bracket)</td> <td>3/4" NPT</td> </tr> <tr> <td>02</td> <td>M16 x 2P (for mounting bracket)</td> <td>1/2" NPT</td> </tr> <tr> <td>03</td> <td>M16 x 2P (for mounting bracket)</td> <td>M20 x 1.5P</td> </tr> <tr> <td>04</td> <td>1/2" NPT</td> <td>3/4" NPT</td> </tr> <tr> <td>05</td> <td>1/2" NPT</td> <td>1/2" NPT</td> </tr> <tr> <td>06</td> <td>1/2" NPT</td> <td>M20 x 1.5P</td> </tr> <tr> <td>07</td> <td>3/4" NPT</td> <td>3/4" NPT</td> </tr> <tr> <td>08</td> <td>3/4" NPT</td> <td>1/2" NPT</td> </tr> <tr> <td>09</td> <td>3/4" NPT</td> <td>M20 x 1.5P</td> </tr> <tr> <td>10</td> <td>1/2" BSP</td> <td>3/4" NPT</td> </tr> <tr> <td>11</td> <td>1/2" BSP</td> <td>1/2" NPT</td> </tr> <tr> <td>12</td> <td>1/2" BSP</td> <td>M20 x 1.5P</td> </tr> <tr> <td>13</td> <td>3/4" NPT</td> <td>None</td> </tr> <tr> <td>14</td> <td>M20 x 1.5</td> <td>None</td> </tr> <tr> <td>16</td> <td>1/2" BSP</td> <td>None</td> </tr> <tr> <td>17</td> <td>1/2" NPT</td> <td>None</td> </tr> <tr> <th>Code</th> <th>Certification *</th> </tr> <tr> <td>NN</td> <td>None</td> </tr> <tr> <td>EA</td> <td>FM, CSA Explosion Proof Certified, NEMA 4X</td> </tr> <tr> <th>Code</th> <th>Accessories</th> </tr> <tr> <td>RC</td> <td>IME Model 175RC Mounting Bracket</td> </tr> <tr> <td>PM</td> <td>IME Model 175PM Mounting Bracket</td> </tr> <tr> <td>NR</td> <td>IME Model 175NR Mounting Bracket</td> </tr> <tr> <td>MM</td> <td>IME Model 175MM Mounting Bracket</td> </tr> <tr> <th>Code</th> <th>2 Inch "U" Bolt with Nuts and Washers</th> </tr> <tr> <td>00</td> <td>None</td> </tr> <tr> <td>01</td> <td>IME Model 17508, 1 Set (For IME Model 175RC)</td> </tr> <tr> <td>02</td> <td>IME Model 17508, 2 Sets (For IME Model 175PM &amp; 175NR)</td> </tr> </tbody> </table>	Code	Options, Housing	A	Die cast Aluminum, Epoxy Coated	T	SS316, Electro Polished	Code	Instrument Connection (T1)	Conduit Size (T2)	01	M16 x 2P (for mounting bracket)	3/4" NPT	02	M16 x 2P (for mounting bracket)	1/2" NPT	03	M16 x 2P (for mounting bracket)	M20 x 1.5P	04	1/2" NPT	3/4" NPT	05	1/2" NPT	1/2" NPT	06	1/2" NPT	M20 x 1.5P	07	3/4" NPT	3/4" NPT	08	3/4" NPT	1/2" NPT	09	3/4" NPT	M20 x 1.5P	10	1/2" BSP	3/4" NPT	11	1/2" BSP	1/2" NPT	12	1/2" BSP	M20 x 1.5P	13	3/4" NPT	None	14	M20 x 1.5	None	16	1/2" BSP	None	17	1/2" NPT	None	Code	Certification *	NN	None	EA	FM, CSA Explosion Proof Certified, NEMA 4X	Code	Accessories	RC	IME Model 175RC Mounting Bracket	PM	IME Model 175PM Mounting Bracket	NR	IME Model 175NR Mounting Bracket	MM	IME Model 175MM Mounting Bracket	Code	2 Inch "U" Bolt with Nuts and Washers	00	None	01	IME Model 17508, 1 Set (For IME Model 175RC)	02	IME Model 17508, 2 Sets (For IME Model 175PM & 175NR)
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Note:

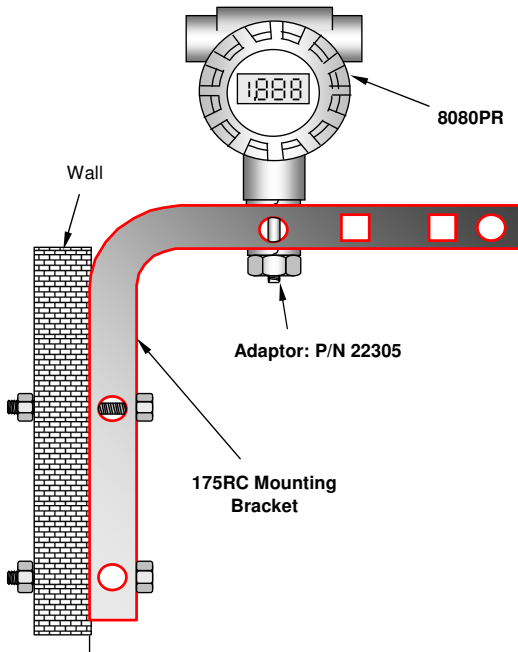
- 1 FM/ATEX Certifications Pending at time of publication
- 2 BSP & Metric Threads are not Certified by CSA



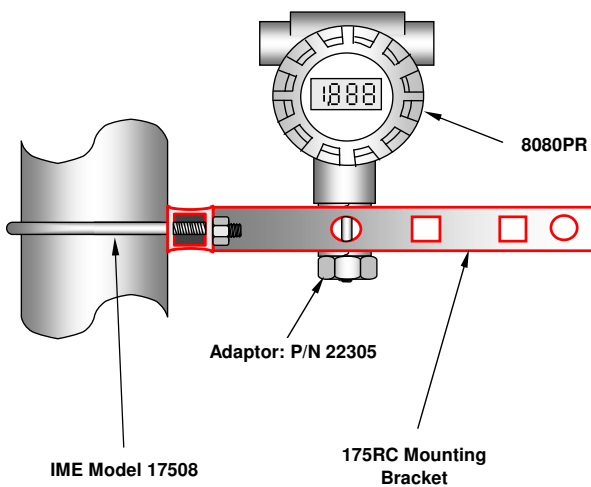
MODEL 175RC MOUNTING BRACKET

IME MODEL 175RC

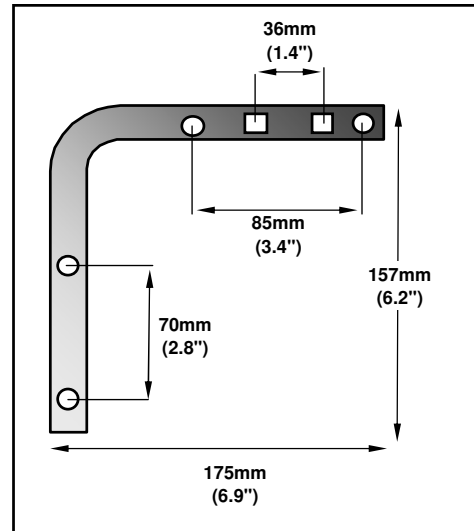
PANEL / WALL MOUNTING CONFIGURATION  
 9 mm or 5/16 bolts for mounting bracket to wall or panel  
 (Not Supplied)  
 Adaptor P/N: 22305 (Optional)



2" PIPE MOUNTING CONFIGURATION  
 2 Inch "U" Bolt with Nuts and Washers (Optional)  
 Adaptor P/N: 22305 (Optional)



Dimensions

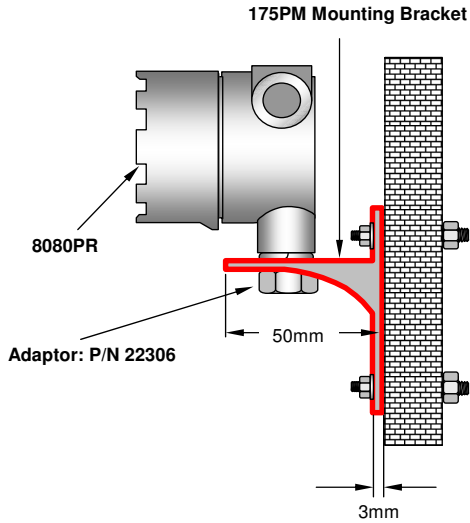


**MODEL 175PM MOUNTING BRACKET**

**IME MODEL 175PM**

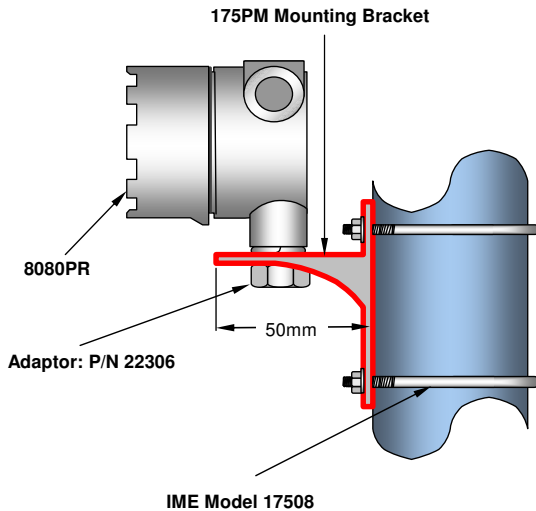
**PANEL / WALL MOUNTING CONFIGURATION**

9 mm or 5/16 bolts for mounting bracket to wall or panel  
 (Not Supplied)  
 Adaptor P/N: 22306 (Optional)

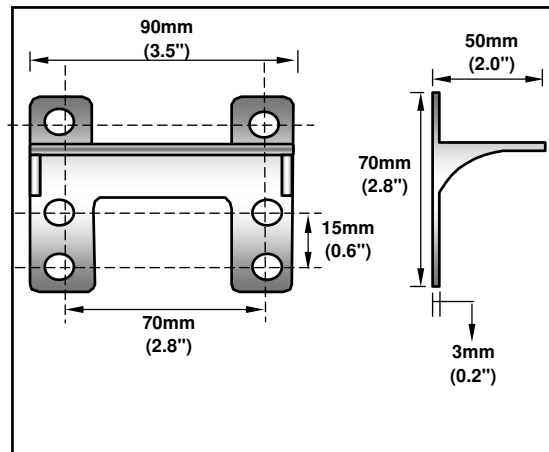


**2" PIPE MOUNTING CONFIGURATION**

2 Inch "U" Bolt with Nuts and Washers (Optional)  
 Adaptor P/N: 22306 (Optional)



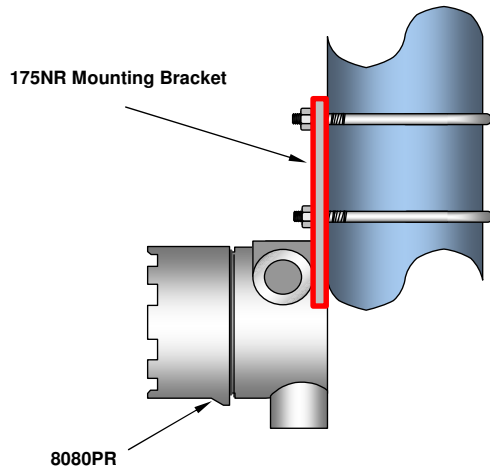
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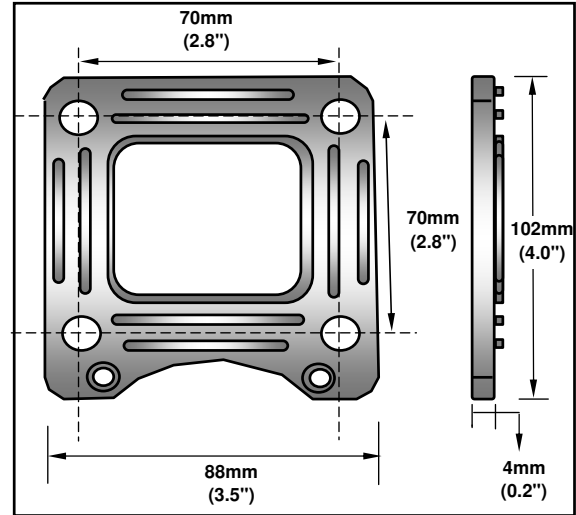
MODEL 175NR AND 175MM MOUNTING BRACKET

IME MODEL 175NR

2" PIPE MOUNTING CONFIGURATION  
2 Inch "U" Bolt with Nuts and Washers

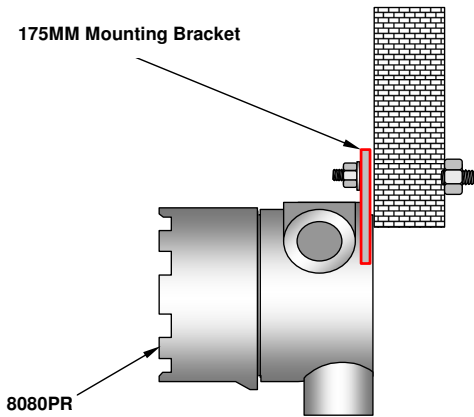


Dimensions



IME MODEL 175MM

PANEL / WALL MOUNTING CONFIGURATION  
9 mm or 5/16 bolts for mounting bracket to wall or panel  
(Not Supplied)



Dimensions

