INTERNATIONAL METAL ENGINEERING

TEMPERATURE INDICATOR WITH DUAL RELAYS   8080PR1

- 4 - 20 mA OUTPUT

- 4 DIGIT LED DISPLAY IN DEGREE C OR F

- RUGGED NEMA 4X ENCLOSURE

- CHOICE OF ALUMINUM OR SS316 ENCLOSURE

- EXPLOSION PROOF CERTIFIED

- 3 YEARS WARRANTY

Introduction
IME Model 8080PR1 allows 2 independent alarms to be assigned over the temperature range of the sensor. The unit will accept an input from a Pt100 RTD Sensor 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 Deg F or Deg C, it also serves as an accurate and repeatable temperature switch.

Description
IME Model 8080PR1 Temperature Indicator are designed for use in process industries where vibration, inclement weather and corrosive atmospheres prevail. The electronics are enclosed in a copper-free 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 CSA, ATEX & IECEx.

LED Meter
Model 8080PR1 has a 4 digit LED display. Choice of °C or °F, alarm settings etc can be adjusted via the membrane switches located in the front panel.

Mounting
A wide choice of stainless steel mounting brackets are available for mounting the Model 8080PR1 on either a 2" pipe or wall.

Certification System

CSA ® C US	CLASS I, DIV I GROUPS B, C AND D CLASS II, DIV I GROUPS E, F AND G NEMA 4X, T6
Ex	ATEX II 2 G D Ex d IIC T6 Gb Ex tb IIIC 85°C Db IP68 Ta = -40°C to +60°C
IECEx	Ex d IIC T6 Gb Ex tb IIIC 85°C Db IP68 Ta = -40°C to +60°C

Functional Specifications

Indication Accuracy

0.1% of Calibrated range +/- 1 digit

Alarm Status Indication

LED on front panel

Display Height

10.0 mm (0.4") high

Input

RTD Pt100

Contact Rating

230 VAC, 5A, Resistive; 24VDC, 5A, Resistive

Output Signal

4- 20 mA

Supply Voltage

12 ~ 28 VDC

Operating Temperature

-40 - 60 ^{o}C

Weight

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

Material of Construction

Enclosure epoxy coated Copper-Free Aluminum or SS316 as specified

O Rings

Buna N

Optional Accessories

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

TEMPERATURE INDICATOR WITH DUAL RELAYS　　　　　8080PR1

Both the Aluminum and the SS316 housing are certified NEMA 4X. As indicated below. IME model 8080PR1 can be optionally provided with certification and a stainless steel name plate for use in Hazardous Area applications.
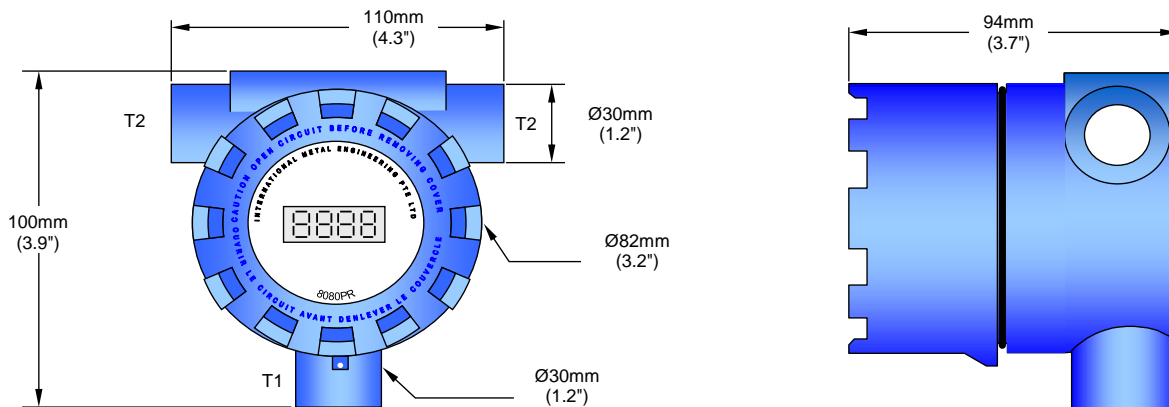
Ordering Information

Model	Description					
8080PR1	Field Mounted Temperature Indicator with Dual Relays and 4- 20 mA Output					
	Code	**Options, Housing**				
	A	Die cast Aluminum, Epoxy Coated				
	T	SS316, Electro Polished				
		Code	**Instrument Connection**	**Conduit Size (T2)**		
		01	M16 x 2P (See note 1)	¾" NPT		
		02	M16 x 2P (See note 1)	½" NPT		
		03	M16 x 2P (See note 1)	M20 x 1.5P (See note 2)		
		04	½" NPT	¾" NPT		
		05	½" NPT	½" NPT		
		06	½" NPT	M20 x 1.5P (See note 2)		
		07	¾" NPT	¾" NPT		
		08	¾" NPT	½" NPT		
		09	¾" NPT	M20 x 1.5P (See note 2)		
		10	½" BSP (See note 2)	¾" NPT		
		11	½" BSP (See note 2)	½" NPT		
		12	½" BSP (See note 2)	M20 x 1.5P (See note 2)		
		13	¾" NPT	None		
		14	M20 x 1.5P (See note 2)	None		
		16	½" BSP (See note 2)	None		
		17	½" NPT	None		
			Code	**Certification**		
			NN	None		
			E1	CSA, ATEX & IECEx Explosion Proof Certified, NEMA 4X, IP68		
				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)

8080PR1	A	02	E1	PM	02	◄　　　　　　　　　**Typical Model Number**

Note:
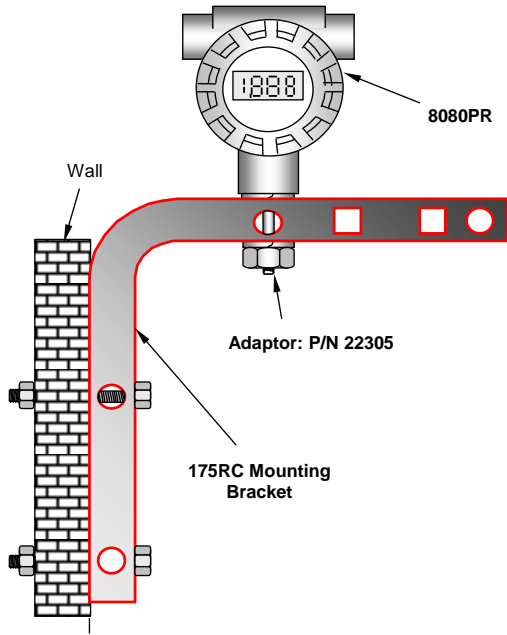
1　Ports with M16 x 2P thread are not through holes, they are for Mounting only.
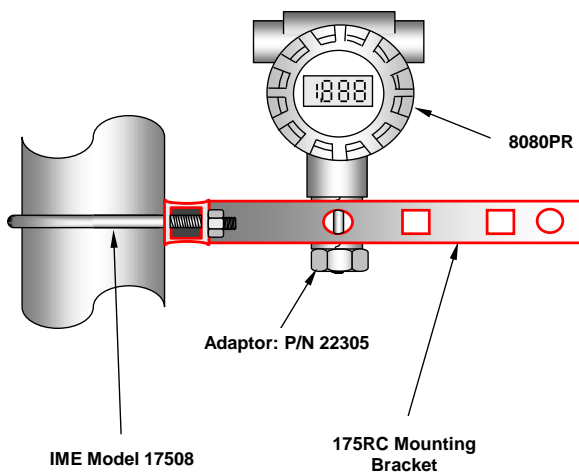
2　½"BSP & M20 x 1.5P Threads are not Certified by CSA

INTERNATIONAL METAL ENGINEERING

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)

8080PR

Wall

Adaptor: P/N 22305

**175RC Mounting
Bracket**

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

8080PR

Adaptor: P/N 22305

IME Model 17508

**175RC Mounting
Bracket**

Dimensions

36mm (1.4")
85mm (3.4")
70mm (2.8")
157mm (6.2")
175mm (6.9")

MODEL 175PM MOUNTING BRACKET
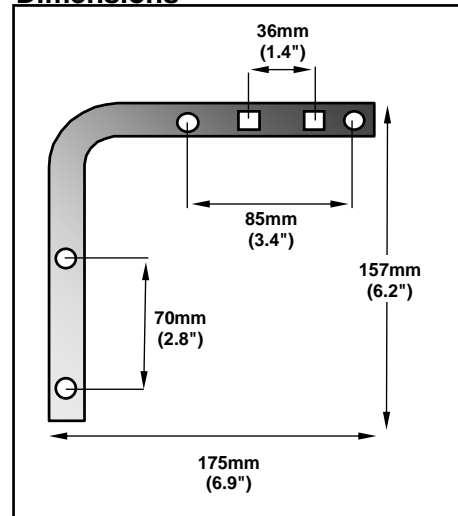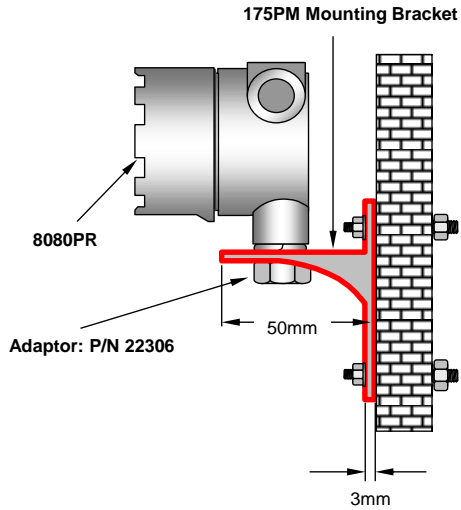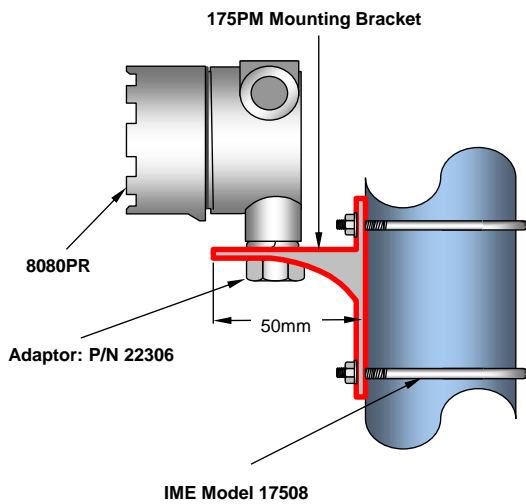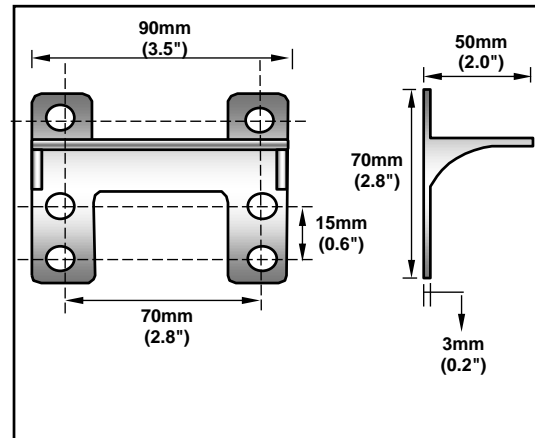
IME MODEL 175PM

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

175PM Mounting Bracket

8080PR

50mm

Adaptor: P/N 22306

3mm

2" PIPE MOUNTING CONFIGURATION
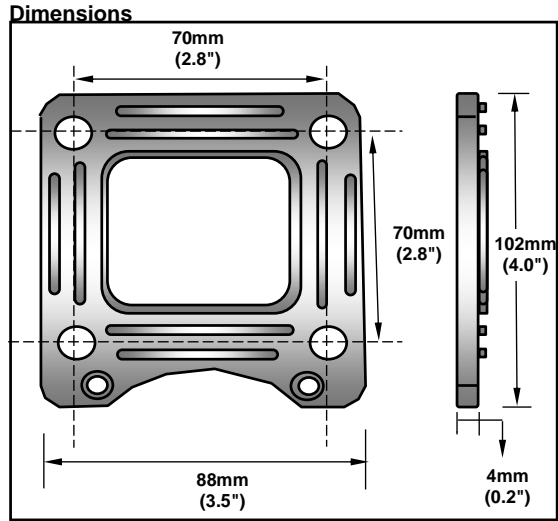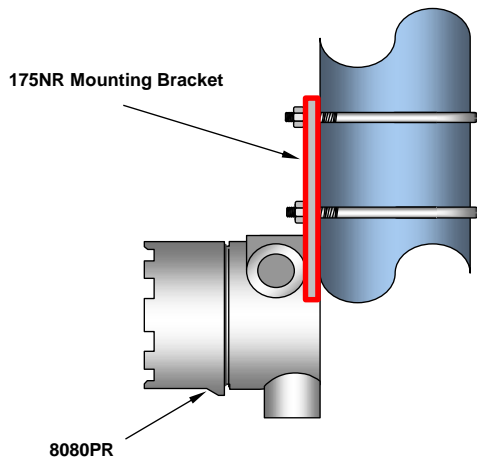2 Inch "U" Bolt with Nuts and Wahsers (Optional)
Adaptor P/N: 22306 (Optional)

175PM Mounting Bracket

8080PR

50mm

Adaptor: P/N 22306

IME Model 17508

Dimensions

90mm
(3.5")

50mm
(2.0")

70mm
(2.8")

15mm
(0.6")

70mm
(2.8")

3mm
(0.2")

INTERNATIONAL METAL ENGINEERING

MODEL 175NR AND 175MM MOUNTING BRACKET

IME MODEL 175NR

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

175NR Mounting Bracket

8080PR

Dimensions

70mm (2.8")

70mm (2.8")

102mm (4.0")

88mm (3.5")

4mm (0.2")

IME MODEL 175MM

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

175MM Mounting Bracket

8080PR

Dimensions

70mm (2.8")

32mm (1.3")

88mm (3.5")

4mm (0.2")