

BATTERY OPERATED DIGITAL TEMPERATURE INDICATOR

8080KN

- INPUT THERMOCOUPLE AND RTD
- 4 DIGIT LCD DISPLAY IN DEGREE C OR F
- RUGGED NEMA 4X ENCLOSURE
- CHOICE OF ALUMINUM OR SS316 ENCLOSURE
- DESIGNED TO REPLACE BIMETALLIC SENSORS
- EXPLOSION PROOF CERTIFIED
- 3 YEAR WARRANTY



Introduction

IME Model 8080KN Battery Operated Digital Temperature Indicator accepts an input from a standard Type J or K Thermocouple or RTD and provides local indication of temperature in degree F or C. Designed specifically to replace Bimetallic Sensors, 8080KN becomes a universal instrument since only one instrument will indicate the entire useful range of the thermocouple (-100 to 900°C). This eliminates having several bimetallic sensors where the dial range has to be predetermined. Operating costs are also drastically reduced since the temperature sensor can be easily replaced in case of failure, unlike a bimetallic sensor where the entire instrument has to be discarded. Furthermore thermocouples are a lot more reliable, accurate and stable when compared to the archaic bimetallic sensor.





Description

IME Model 8080KN is 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 and for more aggressive environments a SS316 housing is optionally available. The housing meets the requirements of NEMA 4X and are also certified Explosion Proof by FM, CSA, ATEX & IECEx.

Mounting

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

Certification System

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

Functional Specifications

Sensor

Thermocouple Type J / K or RTD Pt100

Indication Accuracy

0.5 Degree C

Display Height

12.5mm (1/2") high

Display Units

Degree C or F, switch selectable

Battery Life

Approx. 12 Months

Calibration

Single point calibration for enhanced accuracy

Operating Temperature

-20 to 70°C

Weight

0.9Kg (2LBS) for Aluminum Unit and 1.4Kg (3LBS) for SS316 unit
not include sensor

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)

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

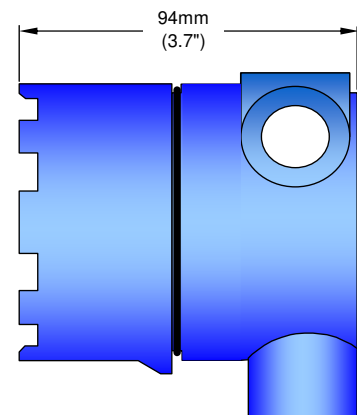
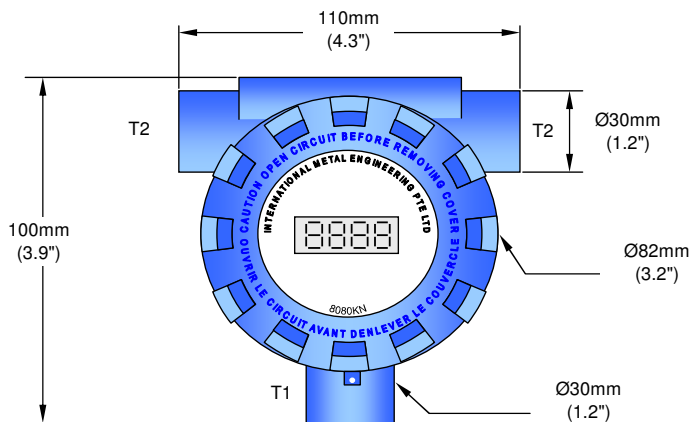
Ordering Information

Model	Description			
8080KN	Field Mounted Battery Powered Temperature Indicator with 4 Digital LCD Display			
	Code	Options, Housing		
	A	Die cast Aluminum, Epoxy Coated		
	T	SS316, Electro Polished		
	Code	Instrument Connection (T1)	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 & 3)	¾" NPT	
	11	½" BSP (See note 2 & 3)	½" NPT	
	12	½" BSP (See note 2 & 3)	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 & 3)	None	
	17	½" NPT	None	
		Code	Certification	
		NN	None	
		E1	FM, 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)		

8080KN	A	02	E1	PM	02	← Typical Model Number
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Note:

- Ports with M16 x 2P thread are not through holes, they are for Mounting only.
- ½" BSP & M20 x 1.5P Threads are not Certified by CSA
- ½" BSP threads are not FM Approved.



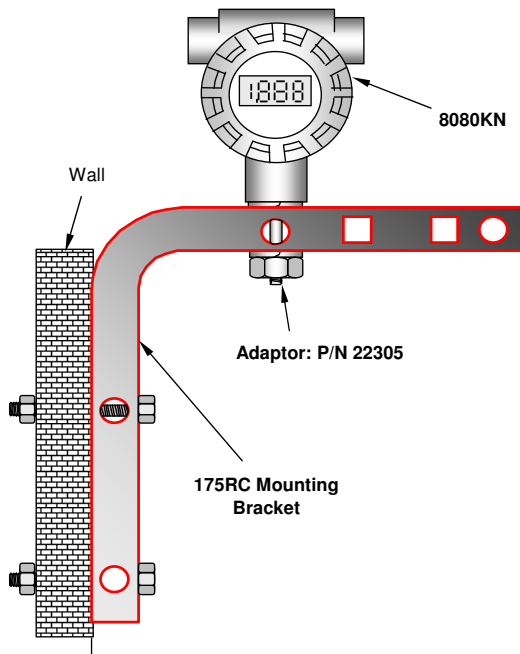
MODEL 175RC MOUNTING BRACKET

IME MODEL 175RC

PANEL / WALL MOUNTING CONFIGURATION

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

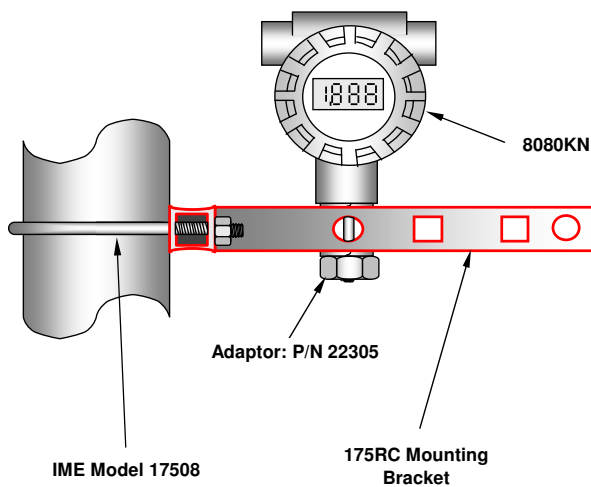
Adaptor P/N: 22305 (Optional)



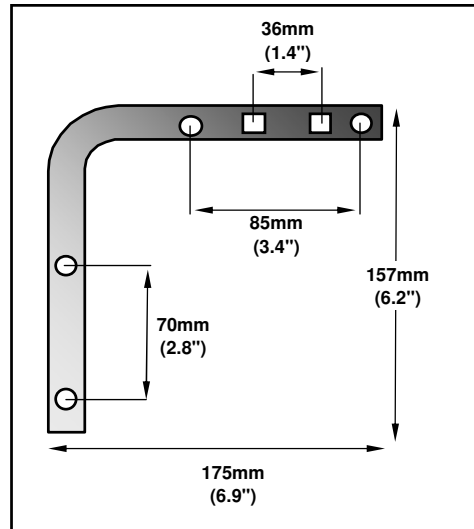
2" PIPE MOUNTING CONFIGURATION

2 Inch "U" Bolt with Nuts and Washers (Optional)

Adaptor P/N: 22305 (Optional)



Dimensions



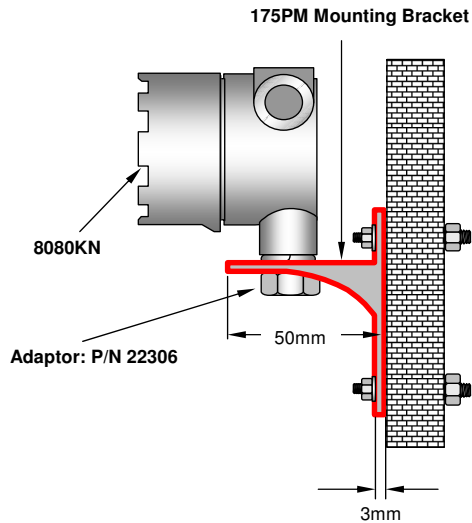
MODEL 175PM MOUNTING BRACKET

IME MODEL 175PM

PANEL / WALL MOUNTING CONFIGURATION

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

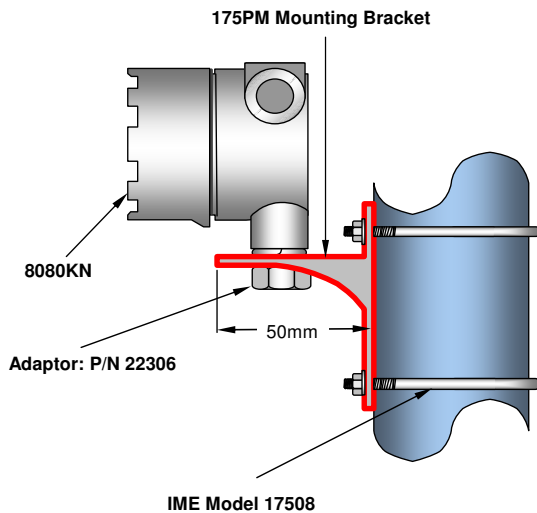
Adaptor P/N: 22306 (Optional)



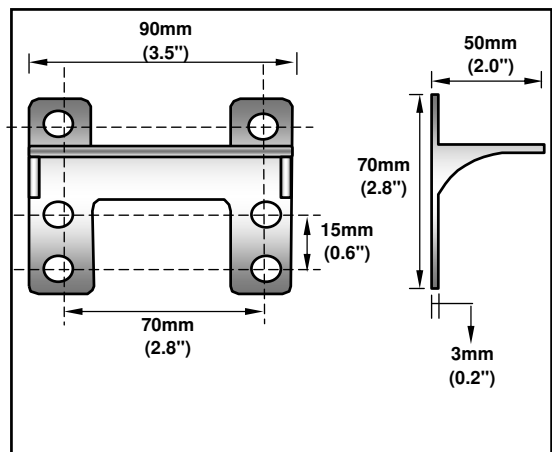
2" PIPE MOUNTING CONFIGURATION

2 Inch "U" Bolt with Nuts and Washers (Optional)

Adaptor P/N: 22306 (Optional)



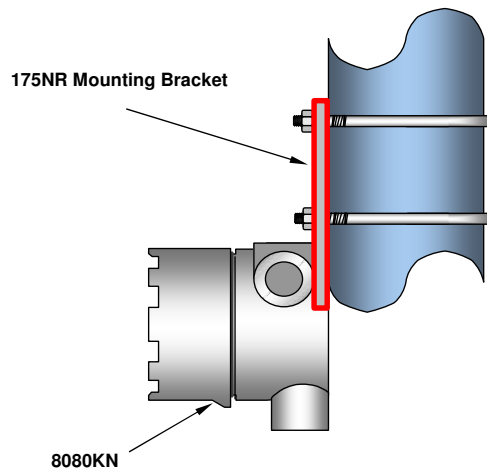
Dimensions



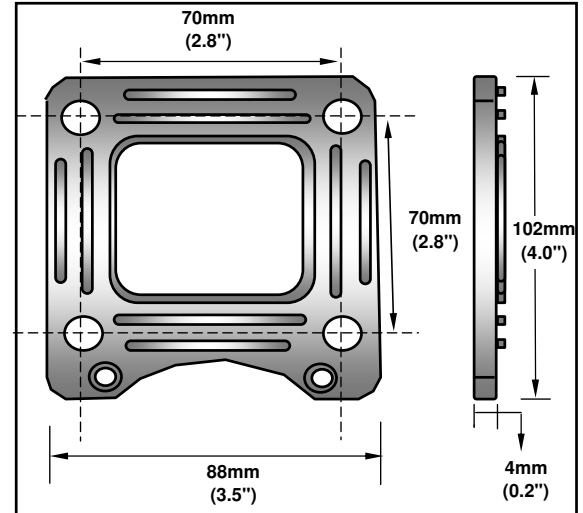
MODEL 175NR AND 175MM MOUNTING BRACKET

IME MODEL 175NR

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

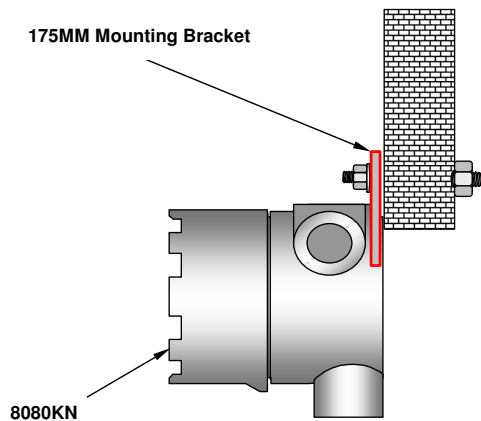


Dimensions



IME MODEL 175MM

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



Dimensions

