

- 4 TO 20 mA INPUT, LOOP POWERED
- LCD GLASS BACKLIT DISPLAY WITH A CHOICE OF ENGINEERING UNITS
- POLYCARBONATE ENCLOSURE
- WALL OR PIPE MOUNTING



### Introduction

IME Model 108EL Loop Powered Digital Indicators allow the process variable from any 4~20 mA current source to be monitored in engineering units. Since the unit derives its power from the loop, no additional power supply or wiring is needed. Because of its low voltage drop (3.5 Volts at 20mA), the model 108EL can be incorporated into almost any 2 wire loop, where local indication of a process variable is needed.

### Description

IME Model 108EL Indicators are designed for use in process industries where vibration, inclement weather and corrosive atmospheres prevail. The electronics are enclosed in a low cost UV resistant polycarbonate housing, which meets NEMA 4X and IP66/68 requirements.

### Backlit LCD Glass Display

The process variable and other relevant information is displayed on a white backlit display approx 32 x 23mm, which is visible in a dark environment. The 5 digit, 7 segment main display (digit height of approx 8mm) displays the process variable. An additional display (digit height of approx. 5mm) allows different engineering units to be displayed such as  $\mu$ s, s, pH, ppm, °F, °C, PSI, MPa, Bar, KPa etc. The percentage of full scale is displayed both digitally and on a 52 bar meter with a 2% resolution.

### Mounting

The Model 108EL can be wall mounted or mounted on a 2" pipe. For mounting the unit on a wall or 2" pipe, a wide choice of stainless steel mounting brackets are also available. (See page 2)

### Functional Specifications

#### Indication Accuracy

0.1% of calibrated range  $\pm 1$  digit

#### Calibration

Via push buttons on the front panel

#### Stability Over Time

0.1% of calibrated range  $\pm 1$  digit over 6 months

#### Response Time

Digital damping 0 to 100s (step 0.1 seconds)

#### Failure Mode

Failure will not affect the loop integrity

#### Voltage Drop

3.5V at 20mA

#### Ambient Operating Temperature

-20 °C to +60 °C

#### Material of Construction of Enclosure

UV Resistant Polycarbonate

#### O Rings

Hydrogenated Nitrile

#### Optional Accessories

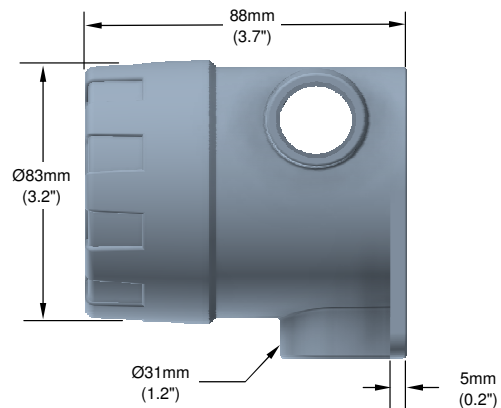
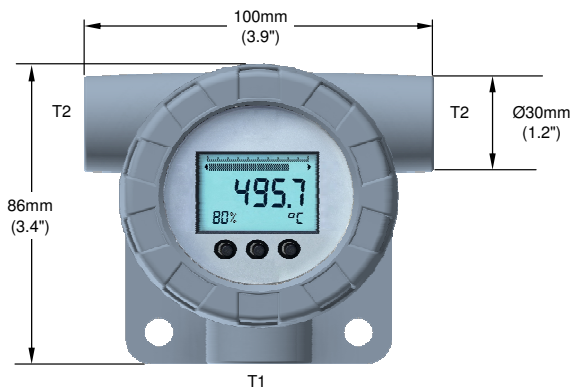
Mounting Brackets (Model 175RC & 175PM)

(See page 2)

### Ordering Information

See page 2 for complete ordering information.

### POLYCARBONATE ENCLOSURE DIMENSIONS



# INTERNATIONAL METAL ENGINEERING

## ORDERING INFORMATION FOR LOOP POWERED INDICATOR

Model	Description				
108EL	Field Mounted LCD Loop Powered Indicator With Engineering Units				
	<b>Code</b>	<b>Instrument Connection (T1)</b>	<b>Conduit Size (T2)</b>		
	01	M16 x 2P(See Note 1)	1/2" NPT		
	02	M16 x 2P(See Note 1)	3/4" NPT		
	03	M16 x 2P(See Note 1)	M20 x 1.5P		
	04	M16 x 2P(See Note 1)	1/2" BSP		
	XX	OTHER(SPECIFY)	OTHER(SPECIFY)		
	<b>Code</b>	<b>Size of Thread &amp; Cable(mm) for Nylon Cable Glands</b>			
	C00	No Cable Gland Required			
	C01	1/2" NPT, Cable Size 5-9mm dia, IME Model 108CG-N-01			
	C02	1/2" NPT, Cable Size 6-12mm dia, IME Model 108CG-N-02			
	C03	1/2" NPT, Cable Size 10-14mm dia, IME Model 108CG-N-03			
	C04	3/4" NPT, Cable Size 9-16mm dia, IME Model 108CG-N-04			
	C05	3/4" NPT, Cable Size 13-18mm dia, IME Model 108CG-N-05			
	C06	M20 x 1.5P, Cable Size 5-9mm dia, IME Model 108CG-N-06			
	C07	M20 x 1.5P, Cable Size 6-12mm dia, IME Model 108CG-N-07			
	C08	M20 x 1.5P, Cable Size 10-14mm dia, IME Model 108CG-N-08			
	<b>Code</b>	<b>Accessories</b>			
	RC	Model 175RC Mounting Bracket			
	PM	Model 175PM Mounting Bracket			
	<b>Code</b>	<b>2 Inch "U" Bolt with Nuts and Washers</b>			
	00	None			
	01	Model 17508, 1 Set (For Model 175RC)			
	02	Model 17508, 2 Sets (For Model 175PM)			
108EL	02	C02	RC	01	← Typical Model Number

Note:  
1 Ports with M16 x 2P thread are not through holes, they are for Mounting only.

### STAINLESS STEEL MOUNTING BRACKET

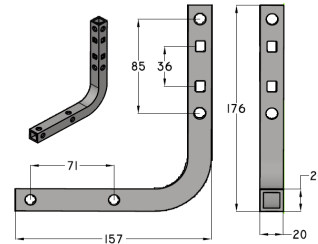
### MODEL 175RC

175RC

#### Introduction

This simple hollow square mounting bracket constructed out of SS316 Stainless Steel, can be used to mount a variety of field devices, either on a wall or panel or a 2" Pipe.

When mounting on a 2" pipe, a "U" Bolt is required, which can be supplied optionally.



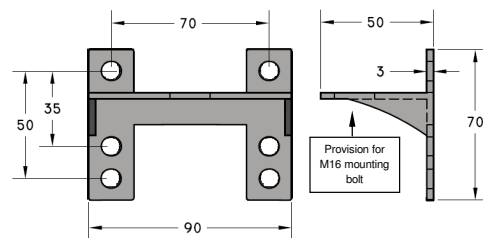
### STAINLESS STEEL MOUNTING BRACKET

### MODEL 175PM

#### Introduction

This simple "L" Shape mounting bracket constructed out of SS316 Stainless Steel, can be used to mount a variety of field devices, either on a wall or panel or on a 2" pipe.

When mounting on a 2" pipe, two "U" Bolts are required, which can be supplied optionally.



### NYLON CABLE GLANDS

### MODEL 108CG

THREAD SIZE	CABLE SIZE(mm)	MODEL NO
1/2" NPT	5-9	108CG-N-01
	6-12	108CG-N-02
	10-14	108CG-N-03
3/4" NPT	9-16	108CG-N-04
	13-18	108CG-N-05
	5-9	108CG-N-06
M20 x 1.5P	6-12	108CG-N-07
	10-14	108CG-N-08

