# FIELD MOUNTED LOOP POWERED INDICATOR

8080EL

- 4 TO 20 mA INPUT
- BACKLIT LCD GLASS DISPLAY WITH WIDE CHOICE OF ENGINEERING UNITS
- CHOICE OF COPPER-FREE ALUMINUM OR SS316 ENCLOSURE
- EXPLOSION PROOF CERTIFIED
- WALL OR PIPE MOUNTING
- 3 YEAR WARRANTY

#### Introduction

IME Model 8080EL Loop Powered Digital Indicators allow the process variable from any 4–20 mA current source to be monitored. 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), it can be incorporated into almost any 2 wire loop, where local indication of a process variable is needed, because the integral transmitter indicator is inaccessible to view or is at a different location.

#### **Description**

IME Model 8080EL Indicators 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 and for more aggressive environments, a SS316 housing is optionally available. The housings meet the requirements of NEMA 4X & IP68, and are also certified Explosion Proof by ATEX/IECEx/FM/CSA.

### **LED Display**

The Model 8080EL can read from -19999 to 99999 with an accuracy of 0.1%  $\pm 1$  digit. A white backlight display allows the unit to be visible in the dark. A wide choice of engineering units, mA, µs, ms, pH, °F, °C, PSI, mPa, bar, Kpa, mbar, Pa, % etc can be programmed using a USB port available. The main display is a 7 segment 5 digit display with a digit height of 8mm. An additional percentage(%) bargraph is available.

## Mounting

The Model 8080EL 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.

### Alarms

Optional two OPTO switch outputs, NPN output and PNP output.

### **Certification System**



II 2G D Ex d IIC T6 Gb Ex tb IIIC T85°C Db IP68 Ta = -40°C to +60°C





Ex d IIC T6 Gb Ex tb IIIC T85°C Db IP68 Ta = -40°C to +60°C



## **Functional Specifications**

**Indication Accuracy** 

0.1% of calibrated range ±1 digit

Calibration

Via switches on the front panel

Display Height

8mm (0.3") high

**Stability Over Time** 

0.1% of calibrated range ±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

**Operating Temperature** 

-20°C to +70°C

Weight

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

Material of Construction of Enclosure

Epoxy coated Copper-Free Aluminum or SS316 as specified

O Rings

Buna N (Nitrile)

**Optional Accessories** 

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

Refer to page 23 for details

#### **Ordering Information**

See page 16 for complete ordering information.



CLASS I, DIV I GROUPS B, C AND D CLASS II/III, DIV I GROUPS E, F AND G