FUZYPRO X PROOF INDICATOR TRANSMITTER

FIELD MOUNTED EXPLOSION PROOF TEMPERATURE TRANSMITTER 8080TR

- **INPUTS: THERMOCOUPLE, RTD, OHM AND MV**
- **HIGH ACCURACY**
- **2 WIRES, 4-20MA OUTPUT**
- **EXCELLENT STABILITY**
- **HIGH EMI-RFI IMMUNITY**
- **CONFIGURABLE BY PC COMMUNICATOR**
- **INPUT/OUTPUT ISOLATED**
- **4 DIGIT LED DISPLAY**
- **EXPLOSION PROOF CERTIFIED**
- **3 YEAR WARRANTY**

Introduction

The FUZYPRO 8080TR is a Digital, PC programmable, galvanicaly isolated 2-wire smart transmitter. The unit converts 13 types of thermocouple sensors; 12 types of RTD sensors, configured as 2, 3 and 4 wires; potentiometer, resistor and millivolt inputs into process current loop. A 24 bit A/D converter is the heart of this outstanding performance.

Description

The FUZYPRO 8080TR Universal input Smart transmitters 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 FM/CSA/ ATEX/IECEx.

The output current is temperature linearized and can be set to be 4 to 20 or 20 to 4mA or any range within these limits. The current is limited to 3.6 and 22mA. The unit updates are 3 times per second for the display and 4 times per second (max) for the current output

Exceptional digital accuracy of typical +/-0.1^{o}C is provided for all the sensors regardless of the calibrated span. Extremely accurate cold-junction temperature measurement provides precise compensation throughout the entire ambient range. The unit also accurately measures and compensates the RTD sensor leads in the 3-wire connection. The Transmitter can be set and wired to perform differential measurement conversions of temperature sensors as well as mV sources.

The Transmitter is fully configurable by connecting to a PC with no external power supply required. The configuration parameters are stored in a non volatile memory. Digital output data can be obtained via a communication port located on the front panel. Continuous, average and max/min readings can be monitored.

Detection of sensor breakage or disconnection of input leads, forces the output to a pre-defined up/down scale value. The unit continuously monitors the sensor and automatically returns to normal operation mode when the sensor is recovered.

Mounting

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

Functional Specifications

Sensor

13 types of thermocouple; 12 types of RTD, mv, potentionmeter, Ohms

Calibration Accuracy

+/-0.05% of span

Output Signal

4~20mA

Polarity Protection

Yes

Isolation

1500V AC between input and output

Burnout Protection

< 3.6mA or >22.1mA (configurable)

Supply Voltage

13~36V DC

Operating Temperature

-50~+80℃ / -45~+185℉

Weight

0.9Kg (2Lb) for Aluminum unit and 1.4Kg 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)