## **Temperature Transmitters**

# 2-Wire Miniature Universal Temperature/Process Transmitters







ETM1

ETM2

### **PROGRAMMABLE**

in the field with your PC and easy to use software.

Can be ordered pre-programmed from Tempco.

Temperature transmitters are used for a variety of reasons. The use of temperature transmitters can eliminate the need for long costly runs of thermocouple wire with less expensive copper signal wire. When the environment is electrically noisy, sending a 4-20 mA signal to the control panel reduces the chance of error.

### **Design Features:**

- \* Two levels of accuracy: ETM1—±0.15% of span ETM2—±0.10% of span
- \* Accepts 11 thermocouple types and 3- or 4-wire RTD sensors
- \* Field programmable with easy to use Windows\*-based configuration software and a PC
- \* Sensor break monitoring, programmable for upscale or downscale
- \* Full access to all features while in operation
- \* Temperature linear output
- \* NAMUR-compliant
- \* Configuration, editing & reading without external power
- \* Easy wiring through the large center hole

The **Tempco ETM Series** of 2-wire transmitters are offered in isolated, non-isolated and high precision isolated versions. They are designed to fit in a standard aluminum, iron or plastic industrial connection head, DIN size B or larger.

### **Additional Design Features for the Isolated Version**

- \* Fully universal, linearized and isolated 3/4 wire RTD, T/C, mV and Ohm
- \* Sensor and system error correction
- \* Low sensor isolation detection
- \* Simplified loop check up with calibration output

The **ETM Transmitters** are built using surface mount components and employ digital technology with non-volatile memory to retain the configuration after programming and the cable is removed.

# Ordering Code: ETM 1 2 3 6

### **Isolation** BOX 1

1 = Non-Isolated

2 = Isolated

### **Input Signal** BOX 2

 $\mathbf{R} = \text{RTD-Pt100}$ 

S = RTD-D100

 $\mathbf{H} = \text{RTD-Pt100}$ 

T = Thermocouple M = mV (ETM2 only)

P = Potentiometer (ETM2 only)

### BOX 3

If thermocouple input, enter thermocouple Type Code;

(if not enter **0**)

J = J thermocouple

**K** = K thermocouple

 $\mathbf{E} = \mathbf{E}$  thermocouple

 $\mathbf{B} = \mathbf{B}$  thermocouple

 $\mathbf{C} = \mathbf{C}$  thermocouple

 $\mathbf{L} = \mathbf{L}$  thermocouple

N = N thermocouple

 $\mathbf{R} = \mathbf{R}$  thermocouple

**S** = S thermocouple **T** = T thermocouple

**U** = U thermocouple

### Minimum Range BOX 4

In degrees (t/c and RTD) mV & ohms (isolated only)

Backfill unused boxes with 0's

Example:  $10^{\circ} = 0010$ 

### Maximum Range BOX 5

In degrees (t/c and RTD) mV & ohms (isolated only)

**Backfill unused boxes with 0's** Example: 950° = 0950

Units: BOX 6

 $\mathbf{F} = {}^{\circ}\mathbf{F}$ 

 $\mathbf{C} = {}^{\circ}\mathbf{C}$ 

M = mV Ohms (isolated only)

**R** = Ohms (isolated only)

▲ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.