

2.50"

#### **Product Features**

- 2-wire loop powered 4-20mA output
- Linearized output to voltage
- Input T/C with cold junction compensation
- · Analog design, potentiometer adjustable
- Factory calibrated for fixed range
- DIN Rail-Mounted

### **Description**

The TT810D loop powered transmitter receives and measures signals from thermocouples and sends an output current of 4-20 mA which is directly proportional to the thermocouple millivolt input. The TT810D transmitter accepts thermocouple sensor types J, K, T, or E

The wide temperature range and stocked availability make the TT810D an excellent choice for temperature signal transmission. It is factory calibrated for fixed range and designed for highest performance and lowest cost.

Precision 20-turn potentiometers allow fine adjustment of ZERO and SPAN. TT810D is DIN rail-mounted conforming to DIN standard 46277 package which is very compact.

## **Specifications**

**@Vnom** = 24 VDC, **T.ambient** = 25°C, **Span nom.** = 100°C

Input: T/C type J, K, T or E

Output: 4-20 mA loop powered

Linearization: Linear to mV, not to temperature

Power Supply: 12-32 VDC, polarity protected

Supply Effect : 0.02 %/V
Temperature Drift (including cold junction drift)

Zero Drift :  $\pm 0.01\%$  FS/°C Span Drift :  $\pm 0.01\%$  FS/°C

Sensor Lead Resistance: 10 K ohms max.

**Accuracy:** 0.15% FS (includes effects of linearity,

hysteresis and repeatability)

**Span/Zero Adjustment**: 20 turn potentiometer,

±10% for zero and span

**Maximum Loop Resistance :** Rmax. = [Vsupply – 9VDC] / 20 mA

Warmup: 30 seconds

 Ambient Operating Temperature : -40 °C.....80 °C (-40 °F....176 °F)

 Storage Temperature : -40 °C.....80 °C (-40 °F....176 °F)

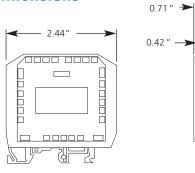
DIN Rail: DIN 46277
Housing Material: Polyamide

**Housing Dimensions :**  $2.44 \text{ "W} \times 2.50 \text{ "H} \times 0.71 \text{ "D}$ 

- Information furnished by Intempco is believed to be accurate and reliable.
   However, no responsability is assumed by Intempco for its use.
- · Specifications subject to change without notice.



#### **Dimensions**



Temperature Standard Ranges			Input			
°C	(°F)	K	J	T	Е	
-50/+50	(-58/+122)					
0/+50	(32/+122)					
0/+100	(32/+212)		•	•	•	
0/+200	(32/+392)	•	•	•	•	
0/+300	(32/+572)	•	•	•	•	
0/+400	(32/+752)	•	•	•	•	
0/+600	(32/+1112)	•	•		•	
0/+800	(32 /+1472)	•	•			
0/+1000	(32/+1182)	•				
0/+1200	(32 /+2192)	•				

For non-standard temperature ranges, specify range

# **Custom Builder**

Model	Input Code	Range
TT810D	K, J, T, E	(/)

Ex.: TT810D - J - (0/100°C)

Rev. A-2010 www.intempco.com TX17.0