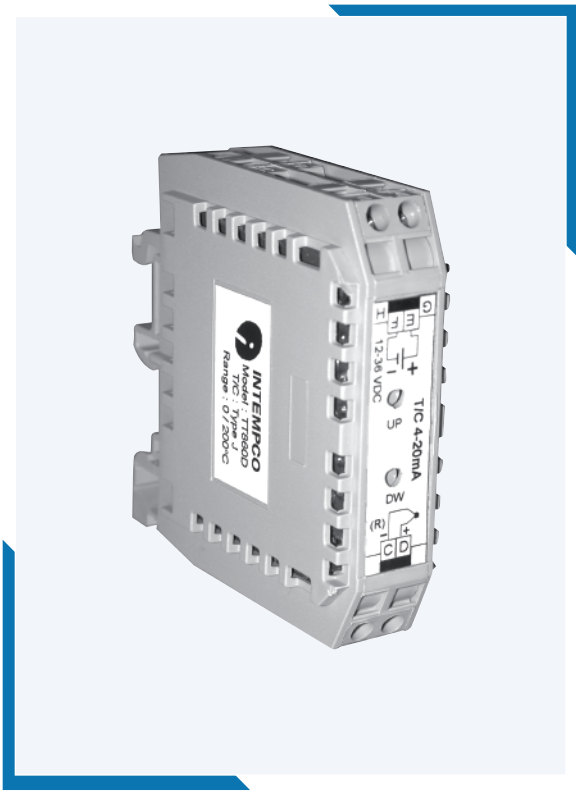
TT820D SERIES

Digital Thermocouple Temperature Transmitter, w/4-20mA Output

Product Features

- *High Quality*
- *4-20mA Loop Powered*
- *Digital Design*
- *Economical*
- *Cold Junction Compensation*
- *Factory Calibrated*



Description

The TT820D is a digital transmitter that converts the signal from a thermocouple to a linearized 4-20 mA output. The TT820D features a one point calibration adjustment with two push buttons as well as an advanced software programming via the RS-232 input. The advanced programming allows a two points calibration, a re-scaling, filtering options and identification of the transmitter.

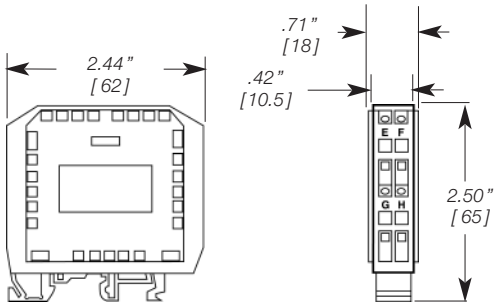
It is factory calibrated and designed for highest performance and lowest cost. Automatic cold junction compensation and a low-drift input amplifier maintain accuracy under varying ambient conditions.

Specifications

@Vnom : 24 VDC, T.ambient = 25°C
Span nom.: T/C = 250 °C (reference to full scale)

Power Supply :	12-36V DC, polarity protected
Input :	Thermocouples type J, K, T, E
Output :	4-20 mA
Supply Voltage Effect :	± 0.02 % / V
Load Capability :	Rmax.= (Vsupply - 12 V) / 20 mA
Zero Drift :	± 0.1 % / °C
Span Drift :	± 0.1 % / °C
Ambient Operating Temperature :	- 40 to +80 °C (-40 to +158 °F)
Warm-up time :	30 sec.
Accuracy :	
K, E, J, T :	± 0.5 % of FS
Cold Junction Compensation Error :	
K :	± 1 °C max. at - 20 to 50 °C
J :	± 2 °C max. at - 20 to 50 °C
T, E :	± 3 °C max. at - 20 to 50 °C

Dimensions



Ordering Information

Model	Input	Range
TT820D	K,J,T and E	(/)

Ex : **TT820-J - (0/100)**
T/C transmitter, Type J, 0 -100°C

Standard Ranges					
°C	(°F)	K	J	T	E
-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 /+1832)	•			
0 / +1200	(32 /+2192)	•			

For non standard ranges, specify range