

# TEMPERATURE TRANSMITTER

## RAIL MOUNTED

### 4-WIRE, ISOLATED, VOLTAGE OUTPUT

PERFORMANCE SPECIFICATIONS			
<b>Input Accuracy.</b>	RTD: $\pm 0.18^{\circ}\text{F}$ Thermocouple, Type E: $\pm 0.36^{\circ}\text{F}$ Thermocouple, Type J: $\pm 0.45^{\circ}\text{F}$ Thermocouple, Type K: $\pm 0.54^{\circ}\text{F}$	<u>Conformance Range</u>	$-328^{\circ}\text{F}$ to $+1562^{\circ}\text{F}$ $-274^{\circ}\text{F}$ to $+1832^{\circ}\text{F}$ $-292^{\circ}\text{F}$ to $+1400^{\circ}\text{F}$ $-238^{\circ}\text{F}$ to $+2498^{\circ}\text{F}$
<b>Output Accuracy.</b>	RTD and Single Point Thermocouples: $\pm 0.01\%$ of Input Span Setting + Input Accuracy Multi-Point Thermocouples: $\pm 0.01\%$ of Input Span + Input Accuracy + Averaging Circuit Accuracy Averaging Circuit Accuracy (%): $.02 \times (\text{Temp Gradient } ^{\circ}\text{F}) \times 100$ (Transmitter Span $^{\circ}\text{F}$ )		
<b>Cold Junction Reference Accuracy.</b>	$\pm 0.81^{\circ}\text{F}$ (T/C Inputs only)		
<b>Isolation.</b>	1000 Vrms input to output to case (Isolated Model only). 1500 Vrms between Power and Input. 1500 Vrms between Power and Output.		
<b>Input Over-range Protection.</b>	$\pm 5\text{VDC}$ for Voltage.		
<b>Input Power.</b>	24VDC $\pm 10\%$ , 117VA $\pm 10\%$ , 230VAC $\pm 10\%$ .		
<b>Power Consumption.</b>	3W max		
<b>Input Impedance.</b>	(T/C) 40M ohms		
<b>Burnout Protection.</b>	Total Sensor Diagnostics user-selected via Windows configuration software; upscale to 24mA (std) or downscale to 3.6mA. Applies when all sensors in the temperature probe are burned out.		
<b>Output Limiting.</b>	-0.2V and 10.5V input over-range, -0.5V and 11.0V for input sensor failure or broken wire.		
<b>RTD Lead Wire Resistance Maximum.</b>	RTD Resistance + 2 times the lead wire resistance must be less than 4000 $\Omega$ . Recommend <35 $\Omega$ per wire for 3-wire RTD inputs.		
AMBIENT CONDITIONS			
<b>Operating and Storage Range.</b>	$-40^{\circ}\text{F}$ to $+185^{\circ}\text{F}$		
<b>Relative Humidity.</b>	0-95%, non-condensing.		
<b>Effect of Ambient Temp on Accuracy.</b>	$\pm 0.015\%$ of span per $^{\circ}\text{F}$ change, max. ( $+0.001\%$ of $\Omega$ reading for RTD inputs).		
<b>Effect of Ambient Temp on Cold Junction Compensation.</b>	$\pm 0.005^{\circ}\text{F}$ per $^{\circ}\text{F}$ change.		
ADJUSTMENTS			
	All settings made using Windows based configuration program, then stored in non-volatile FRAM memory. Cable, software disk and instruction manual included with each transmitter.		
OPTIONS			
<b>Output.</b>	<input type="checkbox"/> 1-5VDC <input type="checkbox"/> 2-10VDC		
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> </div> <div style="width: 50%;"> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>RTD LEADWIRE CONNECTIONS</p> <p>WIRING DETAIL RTD</p> </div> <div style="text-align: center;"> <p>THERMOCOUPLE LEADWIRE CONNECTIONS</p> <p>WIRING DETAIL 1-PT. THERMOCOUPLE</p> </div> </div> </div> </div>			