Temperature Transmitters

# HIGH ACCURACY PROGRAMMABLE TRANSMITTER

RTD, Thermocouple, Voltage or Potentiometer Input, Galvanically Isolated

### The MODEL 652-0 Programmable Transmitter accepts any commonly used temperature sensor, slidewire transducer or millivolt signal and produces a 4 to 20 mA output signal. The model 652-0 features 500V input to output isolation to remove ground loop effects and four filter settings to remove incoming signal noise. Outstanding versatility and compact size make this unit ideal for any temperature application.

## FEATURES/BENEFITS

- · High accuracy, universal input
- · Configuration kit option
- · Digital signal filtering for stable readings

## APPLICATIONS

Process applications where a 4 to 20 mA signal is required

MODEL CHART	
	Description
652-0	Programmable transmitter

ACCESSORY		
	Description	
652-C	Configuration kit	

## SPECIFICATIONS

SPECIFICATIONS	
Input/Output Isolation: 500 VAC RMS.	
Thermocouple Input Range: J: -328 to 2192°F (-200 to 1200°C); K: -328 to	
2498°F(-200 to 1370°C); T: -328 to 752°F (-200 to 400°C); R and S: -14 to 3200°F	
(-10 to 1760°C); E: -328 to 1832°F (-200 to 1000°C); F: -148 to 1112°F (-100 to	
600°C); N: -292 to 2372°F (-180 to 1300°C).	
<b>RTD Input Range:</b> (Pt100 Ω): -328 to 1562°F (-200 to 850°C).	
Output: Linearized 4 to 20 mA.	
Output Impedance: 700 Ω @ 24 VDC.	
Power Requirements: 10 to 35 V.	
Accuracy: T/C: ±0.04% full range input, ±0.04% rdg.; RTD; ±0.01 full range input,	
±0.05% of rdg.; Voltage: 10μV, ±0.07% rdg.; Potentiometer: 0.1% full range input.	
<b>Thermal Drift:</b> Zero: 0.1µV/°C (RTD zero drift is 0.008°F/°F); Span: 100ppm/°C.	
Temperature Limit: Ambient: -40 to 185°F (-40 to 85°C).	
Response Time: < 1 second.	
Update Time: 250 ms max.	
Filtering: Off, 2 seconds, 10 seconds, or adaptive.	
Cold Junction Error: ±29°F (±0.5°C).	
Weight: 0.92 oz (26 g)	
Agency Approvals: CE.	



