

# DEVAR Inc.

## Room Temperature Transmitter With Display Model RTTI

- RTD Sensor and Transmitter Assembly
- 4/20 mA Temperature Output
- True 2 Wire Operation
- 3 1/2 Digit LED Display
- Wash Down Front Panel
- Standard Utility Box Mount



### **GENERAL DESCRIPTION**

The RTTI is designed to accurately sense ambient room temperature, and provide a 4 to 20 mA output signal that is linear to the measured temperature to within  $\pm 0.5\%$ . The room temperature is displayed on the face of the instrument in bright red characters using a 3-1/2 digit LED display. This is a true two wire device with signal and power being provided over a single pair of wires. The required operating voltage ranges from 13 to 40 volts DC.

A precision RTD sensor is provided to measure temperature. The sensor is attached to the back side of the aluminum heat sink and wired over to the transmitter terminal block. The complete unit is housed inside of a flat plastic panel that is fitted with a rear gasket seal. This unit, which mounts to any standard electrical outlet box, can be used in areas requiring periodic wash down.

## SPECIFICATIONS - MODEL RTTI

### GENERAL

Display: 3-1/2 Digit LED with  
0.37 inch high, red characters

Housing: Splash proof front panel with rear  
gasket seal

Material: ABS Plastic plate with polycarbonate  
window and black anodized  
aluminum heat sink

Sensor: 100 Ohm Platinum RTD

Open RTD: Output goes upscale

Temp. Range: -40 to 167 °F (-40 to 75°C)

### PERFORMANCE

Accuracy: ±0.5 °F plus ±0.2% of span,  
combined sensor & transmitter effects on  
linearity, hysteresis and repeatability  
relative to measured temperature

Thermal Effect: Zero shift of ±0.02% / Span / °F  
Span shift of ±0.02% / Span / °F

RFI Immunity: Rated class 3-C

### LOOP CONSIDERATIONS

Power supply: 13.0 to 40 VDC

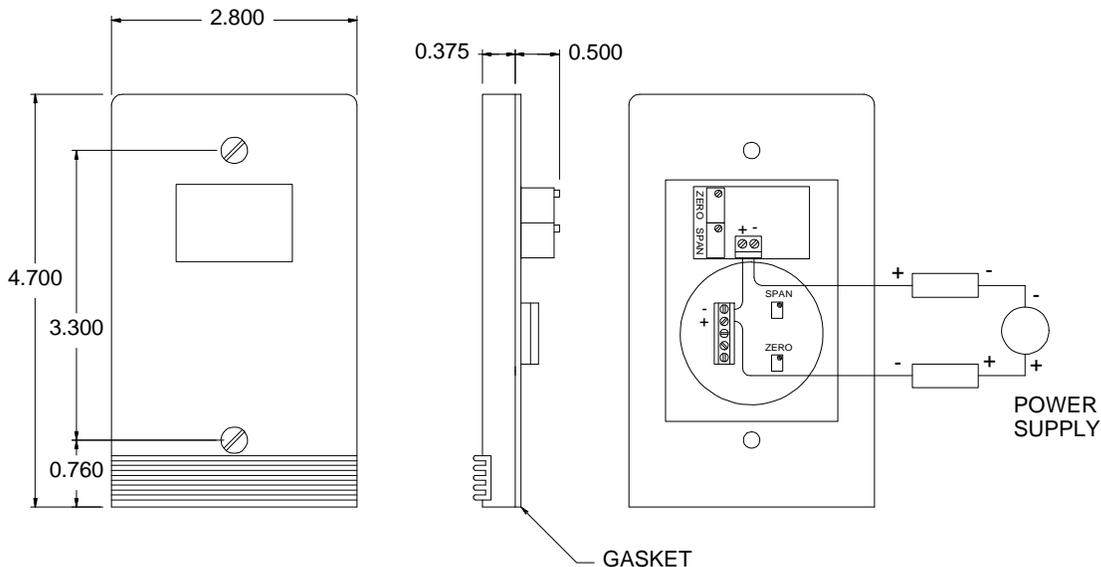
Load Effect: ±0.002% / span / 300 Ohms

Maximum Loop Resistance:  
(Ohms) =  $(V_{\text{supply}} - 13V) / 0.020A$

### STANDARD FIXED RANGES

-0011	-40 / 120°F	(-40 / 50°C)
-0017	-30 / 130°F	(-35 / 55°C)
-0018	40 / 140°F	(5 / 60°C)
-0019	50 / 85°F	(10 / 30°C)
-0022	0 / 100°F	(-18 / 38°C)
-0024	0 / 150°F	(-18 / 66°C)
-0039	-30 / 20°F	(-34 / -7°C)

## GENERAL DIMENSIONS & FIELD WIRING



## **DEVAR Inc.**

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