

**Loop Powered**

**4 to 20 mA Output**

**RTD Sensor and  
Transmitter Assembly**

**Utility Box Mount**

**RFI Immunity Rated Class 3-C**



Typical Applications

Energy Management

Climate Control

Warehouses

Greenhouses

Clean Rooms

Museums

Food Storage

### **GENERAL DESCRIPTION**

The Room Temperature Transmitter is designed to accurately sense ambient room temperature, and provide a loop powered 4 to 20 mA output signal that is linear with the measured temperature to within  $\pm 0.5^{\circ}\text{F}$   $+0.2\%$ . The loop power requirement is within 8.0 to 35 VDC.

A precision RTD is sealed within the heat sink and connected to the transmitter terminals. The complete unit is housed within a plastic panel and comes with a gasket that may be mounted on a standard electrical outlet box.

This sealed unit is suitable for use in areas requiring periodic wash down.

**SPECIFICATIONS - MODEL RTT**

**PERFORMANCE**

Accuracy:  $\pm 0.5^{\circ}\text{F} + 0.2\%$  of span includes sensor & transmitter effects of linearity, hysteresis and repeatability relative to temperature signal.  
 Thermal Effect: Zero shift of  $\pm 0.02\%$  / Span /  $^{\circ}\text{F}$   
 Span shift of  $\pm 0.02\%$  / Span /  $^{\circ}\text{F}$

**POWER SUPPLY**

Working voltage: 8.0 to 35 VDC  
 Loop Considerations: Loop Resistance Load Effect  $\pm 0.002\%$  / span / 300 Ohms.  
 Maximum Loop Resistance (Ohms) = (V supply - 8.0V) / 0.020A

**RFI IMMUNITY**

Rated class 3-C  
 Standard 100 Ohms Pt RTD,  
 alpha = 0.00385

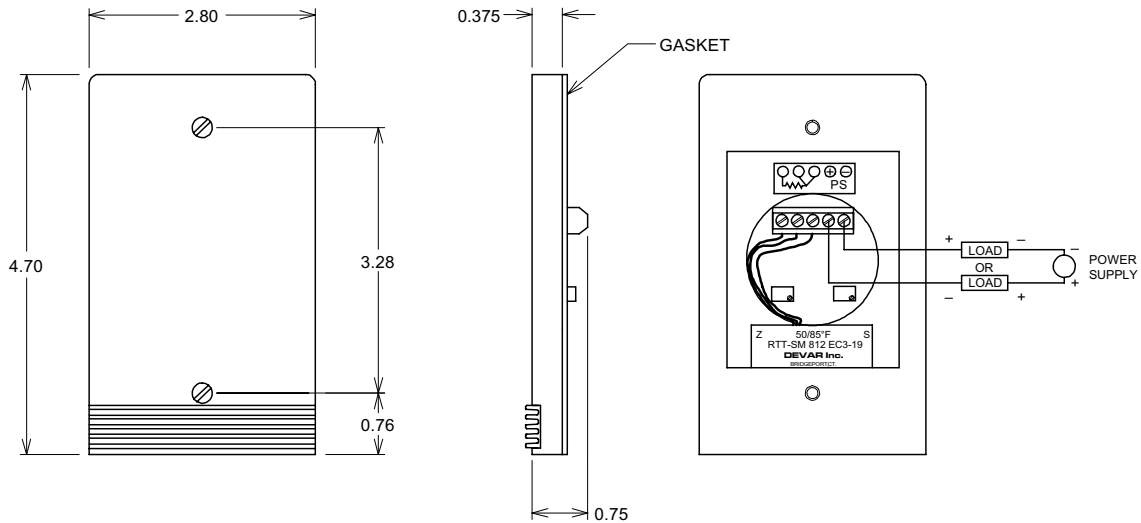
**OPEN RTD INDICATION**

Upscale

**STANDARD FIXED RANGES**

-0011	-40 / 120°F	(-40 / 50°C)
-0012	0 / 200°F	(-18 / 93°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)
-0026	30 / 100°F	(1 / 38°C)
-0029	-40 / 77°F	(-40 / 25°C)
-0031	32 / 122°F	(0 / 50°C)
-0042	50 / 100°F	(10 / 38°C)

**GENERAL DIMENSIONS & FIELD WIRING**



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