

## H4801 and H4807 RTD Temperature Transmitters

## Specification

### Overview

The Honeywell H4801 and H4807 are high performance, compact field temperature transmitters that are extremely rugged and have excellent performance specifications. They are optimized for field measurement, remote control and readout of RTD temperature data.

### Description

Both the H4801 and H4807 transmitters provide a 4-20 mA output signal which is linearized over the full range of the user-specified temperature span.

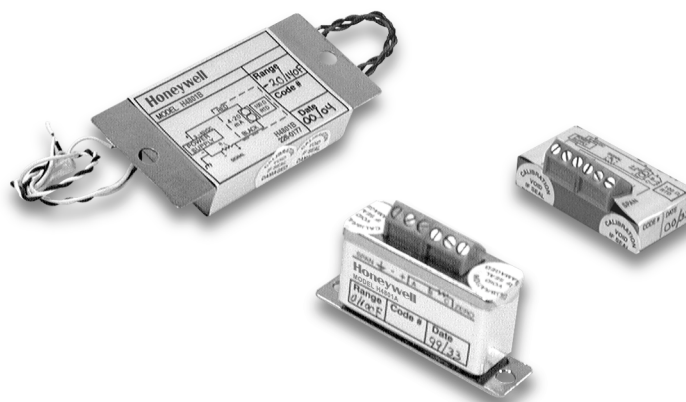


Figure 1—H4801 and H4807 RTD Temperature Transmitters

*The H4801 is:*

- Designed for 385 Platinum 100 ohm RTD input.
- Available with either terminal screws or pigtail leads for sensor input and power signal output.

*The H4807 is:*

- Designed for 1000 ohm 375 Platinum RTD input.
- Available with either terminal screws or pigtail leads.

### Features

#### Superior Performance

- Accuracy of  $\pm 0.05\%$  of span or better
- Strong RFI rejection
- Virtually immune from input voltage fluctuations

#### Easy Field Calibration

Non-interacting constant resolution zero and span controls allow easy, quick field recalibration. This independence allows full calibration to be accomplished without repeating operations.

### Features, continued

#### Cost Savings

Results from superior voltage regulation. Voltage requirements are 8.7 Vdc, minimum plus the load drop.

#### Mounting Options

- Spring brackets for round service heads
- Snap track mounting flange

## Specifications

<b>Transmitter Description</b>	High performance, fixed range
<b>Compatible Sensor*</b>	<i>H4801</i> : 100 ohm, 385 Pt RTD, 3-wire <i>H4807</i> : 1000 ohm, 375 Pt RTD, 2-wire
<b>Transmitter Accuracy</b>	± 0.05 % of span
<b>Zero Range</b>	Unrestricted
<b>Span Range</b>	19 °C to 600 °C (35 °F to 1112 °F)
<b>Field Rangeability</b>	<i>Zero</i> : Limited <i>Span</i> : Limited
<b>Range Adjustment</b>	Potentiometer for both zero and span Field re-calibratable. Not re-rangeable.
<b>Output</b>	Linear 4-20 mA, 2-wire
<b>Input Voltage Effect</b>	0.002 % of span/Volt maximum from 8.7 Vdc to 45 Vdc
<b>Temperature Coefficient</b>	0.008 °C/°C (°F/°F) maximum output error
<b>RTD Current</b>	1 mA nominal
<b>RFI Immunity</b>	Per SAMA specification PMC 33.1
<b>Housing(s)</b>	H4801/H4807-A, -B, -C (See Figures 2, 3, and 4 for dimensions.)
<b>Operating Environment</b>	–50 °C to 80 °C (–58 °F to 176 °F), non-condensing
<b>Storage Environment</b>	–55 °C to 85 °C (–67 °F to 185 °F), non-condensing
<b>Power Requirements</b>	8.7 Vdc + (Rload x 0.02 A) minimum to 45 Vdc maximum, unregulated
<b>Recommended Rload</b>	250 ohms ± 0.1 % at 14 Vdc minimum 750 ohms maximum at 24 Vdc
<b>Connections</b>	Screw terminals
<b>Polarity Protection</b>	Diode protected
<b>Sensor Short Indication</b>	4.0 ± 0.01 mA
<b>Sensor Open Indication</b>	Upscale
<b>Zero and Span Adjustment</b>	Non-interacting zero and span adjust. Resolution is constant. Adjust only the zero pot for in-situ field calibration.
<b>Universal Spares</b>	Recalibrate via zero and span pots.

\*RTDs not included with transmitters.

Dimensions

Dimensions:  $\frac{\text{millimeters}}{\text{inches}}$

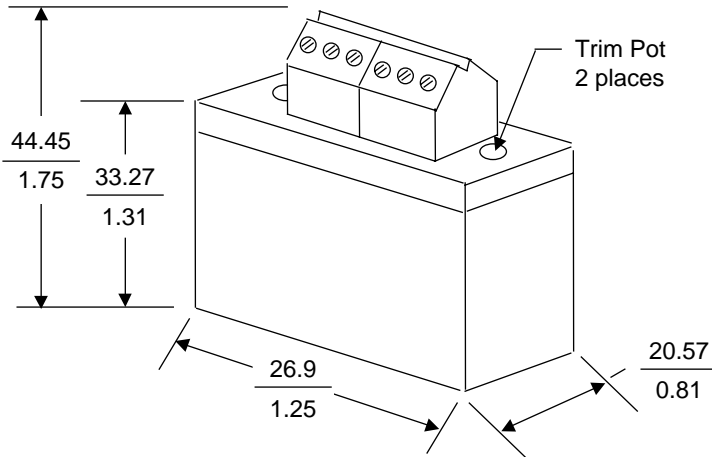


Figure 2—H4801, H4807 – Fixed Range, High Performance, Configuration A

Dimensions:  $\frac{\text{millimeters}}{\text{inches}}$

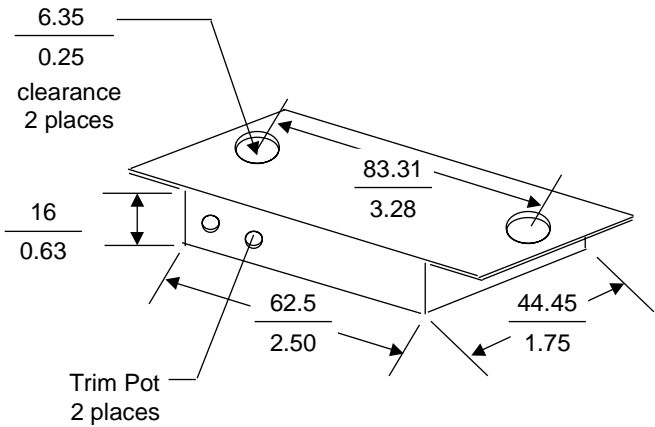


Figure 3—H4801, H4807 – Fixed Range, High Performance, Configuration B

Dimensions:  $\frac{\text{millimeters}}{\text{inches}}$

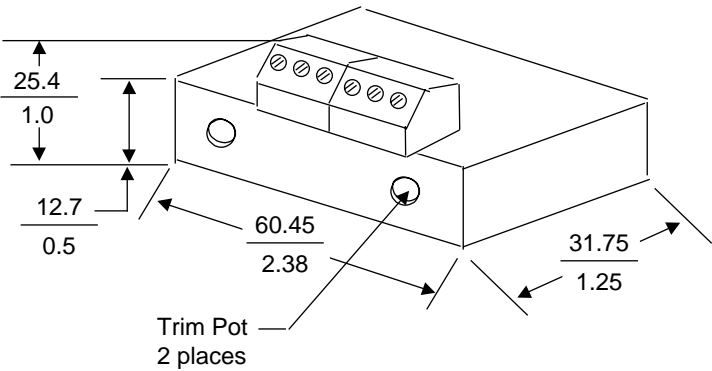


Figure 4—H4801, H4807 – Fixed Range, High Performance, Configuration C

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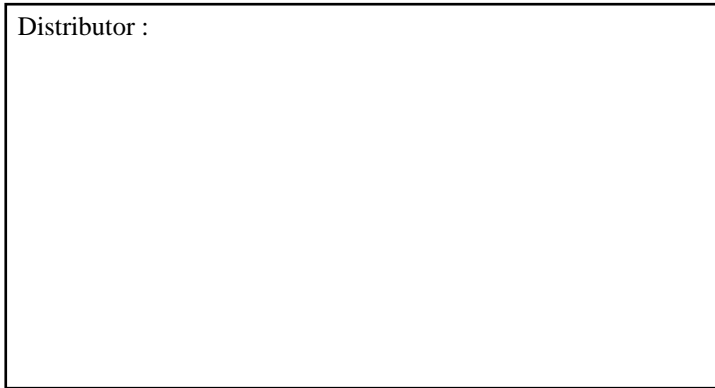
### Warranty/Remedy

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While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Distributor :



For more information, contact Honeywell sales at 1-800-343-0228.

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