

## Product Features

- High accuracy ( $\pm 0.1\%$ )
- 2-wire loop powered 4-20 mA output
- Linearized output to temperature
- Input RTD Pt100 with 3-wire compensation
- Analog design, potentiometer adjustable
- Factory calibrated for fixed range
- DIN Rail-Mounted

## Description

The RT810D Series analog 2-wire, or loop powered, temperature transmitters offer the most effective price/performance ratio in the industry. Factory calibrated for fixed range, they provide a 4-20 mA output linearized to temperature for Pt100. The wide temperature range and stocked availability make the RT810D an excellent choice for temperature signal transmission.

Precision 20-turn potentiometers allow fine adjustment of ZERO and SPAN. RT810D transmitters are of high quality, very accurate and feature completely linearized output to temperature. They are DIN rail-mounted conforming to DIN standard 46277 package which is very compact.

## Specifications

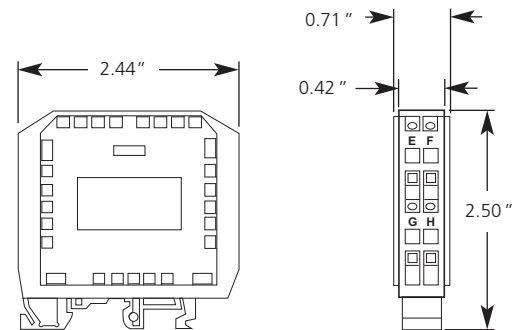
@Vnom = 24 VDC, T.ambient = 25°C, Span nom. = 100°C

<b>Input :</b>	Pt100, 3-wire, $\alpha = 0.00385$ , DIN EN 60751
<b>Output :</b>	4-20 mA loop powered, linear to temperature
<b>Linearization :</b>	$\pm 0.01\%$ FS
<b>Power Supply :</b>	12-32VDC, polarity protected
<b>Supply Effect :</b>	0.02 % / V
<b>Zero Drift :</b>	$\pm 0.01\%$ FS / °C
<b>Span Drift :</b>	$\pm 0.01\%$ FS / °C
<b>Long Term Drift :</b>	$\pm 0.05\%$ FS / year
<b>Excitation Current RTD :</b>	0.8 mA
<b>Sensor Lead Resistance RTD :</b>	500 ohm max.
<b>Accuracy :</b>	0.1 % FS (includes effects of linearity, hysteresis and repeatability)
<b>Span/Zero Adjustment :</b>	20 turn potentiometer, $\pm 10\%$ for zero and span
<b>Maximum Loop Resistance :</b>	$R_{max} = [V_{supply} - 9VDC] / 20mA$
<b>Open Circuit Detection :</b>	Over-scale limit : 27.0 mA, Under-scale limit : 2.2 mA
<b>Warmup :</b>	30 seconds
<b>Ambient Operating Temperature :</b>	-40°C.....80°C (-40 °F....176 °F)
<b>Storage Temperature :</b>	-40°C.....80°C (-40 °F....176 °F)
<b>DIN Rail :</b>	DIN 46277
<b>Housing Material :</b>	Polyamide
<b>Housing Dimensions :</b>	2.44" W x 2.50" H x 0.71" D

- Information furnished by Intempco is believed to be accurate and reliable. However, no responsibility is assumed by Intempco for its use.
- Specifications subject to change without notice.



## Dimensions



Temperature Standard Ranges		Input
°C	(°F)	Pt100 (P)
-50/+50	(-58/+122)	•
0/+50	(32/+122)	•
0/+100	(32/+212)	•
0/+200	(32/+392)	•
0/+300	(32/+572)	•
0/+400	(32/+752)	•
0/+600	(32/+1112)	•
0/+800	(32 /+1472)	•

For non-standard temperature ranges, specify range

## Custom Builder

Model	Input Code	Range
RT810D	P	( ___ / ___ )

Ex.: RT810D - P - (0/100°C)