

Product Features

- High accuracy (±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
- Metal housing
- Fits standard heads

Description

The RT810 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 RT810 an excellent choice for temperature signal transmission.

Precision 20-turn potentiometers allow fine adjustment of ZERO and SPAN. RT810 transmitters are of high quality, very accurate, completely linearized and fit into industry standard connection heads.

Specifications

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

 $\begin{array}{lll} \textbf{Input:} & \textbf{Pt}100, \ 3\text{-wire}, \ \alpha = 0.00385, \ DIN \ EN \ 60751 \\ \\ \textbf{Output:} & 4\text{-}20 \ \text{mA loop powered}, \\ \text{linear to temperature} \\ \\ \textbf{Linearization:} & \pm 0.01 \% \ \ \text{FS} \\ \\ \textbf{Power Supply:} & 12\text{-}32 \ VDC, \ polarity \ protected} \end{array}$

 Supply Effect :
 0.02 % / V

 Zero Drift :
 $\pm 0.01 \%$ FS/°C

 Span Drift :
 $\pm 0.01 \%$ FS/°C

 Long Term Drift :
 $\pm 0.05 \%$ FS/year

Excitation Current RTD: 0.8 mA

Sensor Lead Resistance RTD: 500 ohm max.

Accuracy: 0.1 % FS (includes effects of linearity,

hysteresis and repeatability)

Span/Zero Adjustment: 20 turn potentiometer, ± 10 % for zero and span

Maximum Loop Resistance: Rmax. = [Vsupply - 9VDC] / 20 mA

Open Circuit Detection: Over-scale limit (27.0 mA) or

Under-scale limit (2.2 mA)

Warmup: 30 seconds

Ambient Operating Temperature: -40 °C.....80 °C (-40 °F....176 °F)

Storage Temperature: -40 °C.....80 °C (-40 °F....176 °F)

Housing Material: Die Cast Zinc, Enamel Painted

Housing Dimensions: 1.82" dia. x 1.15" H.

- Information furnished by Intempco is believed to be accurate and reliable.
 However, no responsability 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)	•

For non-standard temperature ranges, specify range

Custom Builder

Model	Input Code	Range
RT810	Р	(/)

Ex.: RT810 - P - (0/100°C)

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