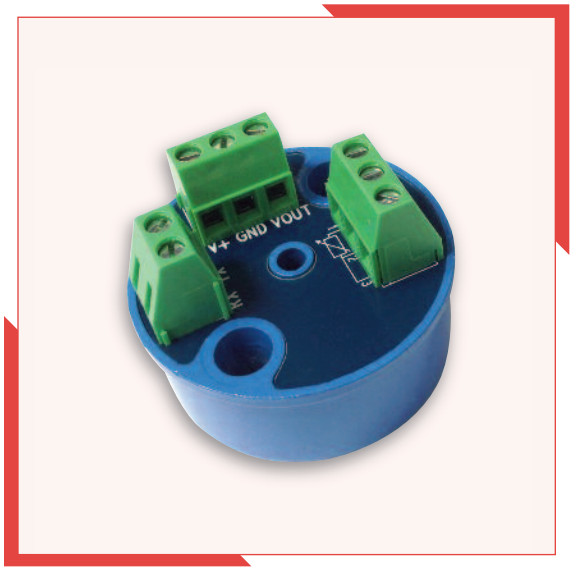
RT721

Programmable RTD Temperature Transmitter
With Voltage Output

Product Features

- *Easy setup, digital calibration and fully field re-programmable via USB module and PC Windows based software*
- *Factory calibrated or customer calibrated*
- *0-1VDC, 0-5 VDC, 1-5 VDC or 0-10 VDC output*
- *High accuracy and linearity*
- *Input 100 ohm Pt RTD (385 alpha) with 3-wire compensation*
- *Low temperature drift and wide ambient temperature range*
- *Metal housing mounts in DIN form B sensor heads*



Description

The RT721 is a low cost three-wire transmitter that converts a Pt100 ohm input to proportional voltage signal. The transmitter provides sensor excitation and includes linearization, lead wire compensation, and lead-break detection functions. Setup and calibration are made with a USB connection to your PC and Intempco's configuration software. Advanced signal processing capabilities and variable range input make this instrument very suitable for the most demanding temperature measurement applications.

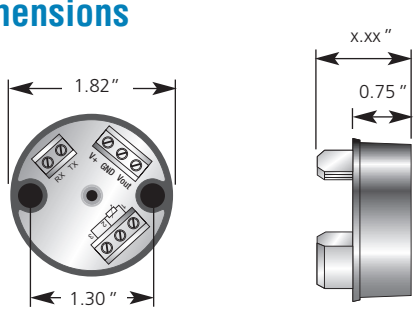
Specifications

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

Input :	Pt100, 3-wire, α = 0.00385, DIN EN 60751
Output :	0-1 VDC, 0-5 VDC, 1-5 VDC or 0-10 VDC, linear to temperature
Range :	Software re-scalable between -200 °C to 600 °C. (min. span of 50 °C)
Span/Zero Adjustment :	By software
Output Resolution :	0.16 mV (15-bit)
Power Supply :	12-30 VDC (15VDC min for 0-10V output), polarity protected
Supply Effect :	Less than 0.001 %/V
Long Term Drift :	≤ 0.1 % FS/Year
Excitation Current RTD :	0.2 mA
Sensor Lead Resistance RTD :	RTD resistance +2 times lead wire resistance must be less than 4 KΩ
Accuracy :	Better than ±0.10 % of span. Includes the effects of linearization and repeatability, but does not include sensor error. For highest accuracy, calibrate with sensor. Accurate to ±(0.05 °C + 0.05 % of calibrated span) or better with two-point calibration with sensor.
Maximum Output Current :	10mA
Open Circuit Detection :	Upscale max Vout +0.5V or Downscale 0V
Warmup :	30 seconds
RFI Effect :	1 % of span or less
Temperature Effect :	± 0.002 °C/°C
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



Intput	Code
Pt100, 3-wire, α = 0.00385, DIN EN 60751	**P3**

Output	Code
0-1 VDC	**VE**
0-5 VDC	**VA**
1-5 VDC	**VB**
0-10 VDC	**VD**

Custom Builder

Model	Input Code	Output Code	Range
RT721	P3	VA, VB, VD	(___ / ___)

Ex.: **RT721 - P3 - VA - (0/100 C)** ;0-5V output, range in °C
Ex.: **RT721 - P3 - VB - (-58/128 F)** ;1-5V output, range in °F