PERFORMANCE MADE SMARTER



2-wire room temperature transmitter

2914

- Room temperature measurement
- Complete with sensor and transmitter
- 4...20 mA output in 2-wire connection
- Easy mounting
- Measurement range 0...70°C
- Supply 8...35 VDC

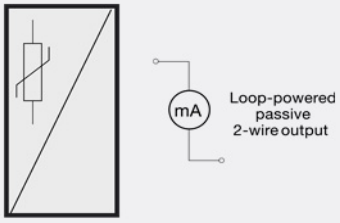
Application

- Electronic temperature measurement in for instance control rooms, offices, heating plants, factories, living rooms, and similar dry rooms.
- Suitable as a transmitter for controllers, trip amplifiers, displays, or superior SCADA systems.

Technical characteristics

- A precision Pt100 sensor with a small mass is mounted on the transmitter input thereby achieving a fast response time.
- The 2-wire output signal of 4...20 mA is proportional and linear to the temperature value that influences the built-in sensor.
- A reversed output signal of 20...4 mA may be ordered.
- A number of different sensor error detection options may be ordered.
- Protected against polarity reversal.
- The bottom of the cabinet can be attached to a wall by two screws.
- Visible or hidden cable access.

Applications



This page is automatically generated on the basis of information provided on www.prelectronics.com and affiliated websites. It is provided to you as a service and for information purpose only. While we have attempted to maintain the information as accurately as possible, the page may contain errors or omissions for which we disclaim any and all liability

Order:

Type	Measurement range	Output	Sensor error value
2914	0...50°C : A	Special : 0	To max., ≥ 23 mA : A
	0...70°C : B	4...20 mA : 2	To min., ≤ 3.8 mA : B
	Special : X	20...4 mA : 9	Special : X

Environmental Conditions

Operating temperature..... 0°C to +70°C
Calibration temperature..... 20...28°C
Relative humidity..... < 95% RH (non-cond.)
Protection degree..... IP30

Mechanical specifications

Dimensions (HxWxD)..... 70 x 121 x 25 mm
Weight approx..... 95 g
Wire size..... 1 x 1.5 mm<sup<2</sup>

Common specifications

Supply
Supply voltage..... 8.0...35 VDC
Internal power dissipation..... 25 mW…0.8 W

Response time
Response time..... 10 s (@ 0.5 m/s)

Voltage drop..... 8.0 VDC
Warm-up time..... 5 min.
Signal / noise ratio..... Min. 60 dB
Accuracy..... Better than 0.3°C
Signal dynamics, input..... 17 bit
Signal dynamics, output..... 16 bit
Effect of supply voltage change..... < 0.005% of span / VDC
Temperature coefficient..... < ±0.01% of span / °C
Linearity error..... < 0.1% of span
EMC immunity influence..... < ±0.5%

Input specifications

Common input specifications
Max. offset..... 50% of max.°C

RTD input
Sensor current..... > 0.2 mA, < 0.4 mA

Measurement range..... 0...70°C
Min. measurement range..... 25°C (span)

Output specifications

Current output
Signal range..... 4…20 mA
Min. signal range..... 16 mA
Load (@ current output)..... ≤ (Vsupply - 8) / 0.023 [Ω]
Load stability..... ≤ 0.01% of span / 100 Ω
NAMUR NE43 Upscale/Downscale..... 23 mA / 3.5 mA

Common output specifications
Updating time..... 135 ms

of span..... = of the presently selected range

Observed authority requirements

EMC..... 2014/30/EU
EAC..... TR-CU 020/2011