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

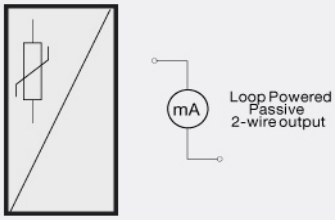
**Application**

- 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.

**Connection**



## Environmental Conditions

| | |
|---|---|
| Specifications range | 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 mm2 |

## Common specifications

| | |
|---|---|
| Supply voltage | 8.0...35 VDC |
| Internal consumption | 25 mW…0.8 W |
| Voltage drop | 8.0 VDC |
| Warm-up time | 5 min. |
| Signal / noise ratio | Min. 60 dB |
| Response time | 10 s (@ 0.5 m/s) |
| 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

| | |
|---|---|
| Max. offset | 50% of max.°C |
| Measurement range | 0...70°C |
| Min. measurement range | 25°C (span) |
| Sensor current, RTD | > 0.2 mA, < 0.4 mA |

## Output specifications

| | |
|---|---|
| Max. offset | 20% of max. mA |
| Current output: Signal range | 4…20 mA |
| Min. signal range | 16 mA |
| Updating time | 135 ms |
| Load resistance, current output | ≤ (Vsupply - 8) / 0.023 [Ω] |
| Load stability, current output | ≤0.01% of span/100 Ω |
| NAMUR NE 43 Upscale/Downscale | 23 mA / 3.5 mA |
| *of span | = Of the presently selected range |

## Approvals

| | |
|---|---|
| EMC | EN 61326-1 |
| GOST R | Yes |