

RTD INPUT ISOLATED 2-WIRE TRANSMITTER

RTI-2

- ACCURACY OF 0.1%
- PLATINUM LINEARIZATION
- COMPLETE GALVANIC ISOLATION
- DIN RAIL MOUNTING
- 3-YEAR WARRANTY



The RTI-2, 2-wire isolated transmitter accepts any 2 or 3 wire RTD (platinum, copper, nickel) generating a proportional 4-20 mA process output current.

Standard features include linearization for platinum RTDs, and the ability to accept input from two RTD in order to extract their differential temperatures.

Exceptional input to output high common mode rejection (CMR) and high degree of filtering, eliminate false output signals, providing a low ripple output current.

Calibration is performed by means of an internal DIP switch array for the coarse range setting and two (Zero and Span) front accessible multi-turn potentiometers which are used for the final fine-tuning.

The RTI-2 is equipped with "test" terminals which allow monitoring of the output current by measuring the voltage drop across a 10 Ω internal resistor, without opening the current loop.

The unit is housed in a polycarbonate plastic enclosure mounted on a standard DIN rail.

The RTI-2 units can be mounted side by side, with no wasted space in high density installation.

SPECIFICATIONS

RTI-2

INPUT:

3-wire Pt-100 according to BS 1904 and DIN 43760 characteristics.
Option: Pt-50, 500, Cu-10, Ni-120

LEADS COMPENSATION ERROR:

< 0.1°C/ 20Ω leads resistance

SENSOR EXCITATION: < 1 mA

OUTPUT: 4 - 20 mA, (25 mA limited)

LOOP RESISTANCE: $R_{max}(\Omega) = (V_{supply}-10)/.02$

ISOLATION: 1500 Vdc or peak ac

RESPONSE TIME: 160 msec (0-98%)

INPUT SPAN CHANGE:

26 to 810°C
Span Calibration: Three DIP switches and "Span" potentiometer

INPUT ZERO CHANGE: -62 to + 232°C

Zero Calibration: Three DIP switches and "Zero" potentiometer

ACCURACY (Including linearity, hysteresis and repeatability):

<±0.1% of span

TEST TERMINALS: 40 to 200 mV represent 4-20 mA

SUPPLY VOLTAGE:

10 - 40 Vdc reverse polarity protected

SUPPLY AND LOAD VARIATION EFFECT:

< ±0.03% of span for full change

CMR: 127db typical dc to 60 Hz

TEMPERATURE STABILITY: ±0.01% of span /1°K

OPERATING TEMPERATURE:

-20 to + 70°C
Option: -30 to +85°C

STORAGE TEMPERATURE: -30 to +85°C

HUMIDITY: 5 - 95% relative, non condensed

HOUSING: Plastic polycarbonate

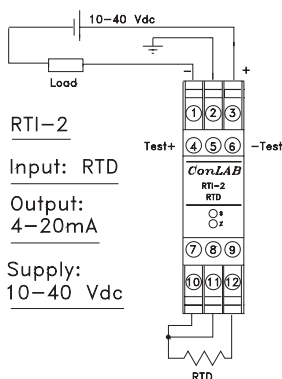
PROTECTION LEVEL:

Box: According to IP-40
Terminals: According to IP-20

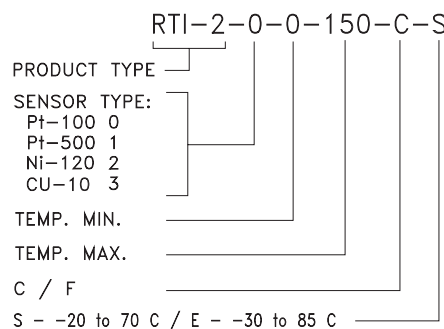
MOUNTING:Standard 35 mm DIN rail

WEIGHT: 130 grams

Connection Diagram



Ordering Information



Dimensions(mm)

