

DIN Rail Mount Loop Powered RTD Input Signal Conditioner

DRA-RTT-2



- ✓ ±0.1% Accuracy
- ✓ Linearized
- ✓ Field Rangeable
- ✓ Non-Isolated
- ✓ Economical

DRA-RTT-2 is a non-isolated signal conditioner that accepts 100 Ω Platinum RTD input and converts this into a 4 to 20 mA process current output which is linearly proportional to temperature. These signal conditioners incorporate excellent lead wire compensation and linearization circuitry.

Field ranging is accomplished by using an internal DIP switch array for coarse range setting and front panel accessible multi-turn zero and span potentiometers for fine tuning. Test terminals are provided to monitor the transmitter's 4 to 20 mA output without disturbing the actual process loop.

Specifications

Input: 3-wire Pt 100 RTD, $a = 0.00385$, according to DIN 43760/BS1904

Input Span Range: 30 to 810°C (86 to 1490°F)

Input Zero Range: -55 to 202°C (-67 to 395°F)

Field Ranging: Done by three "zero" DIP switches, three "span" DIP switches and two fine tuning potentiometers

RTD Sensor Lead Resistance: < 50 Ω (two ways)

Lead Compensation Error: < ±0.05°C/10 Ω lead resistance

Sensor Excitation: < 1 mA

Output: 4 to 20 mA

Test Terminals: 40 to 200 mV represents 4 to 20 mA

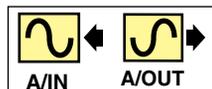
Supply Voltage: 10 to 36 Vdc

Supply Variation Effect: < ±0.03% of span for full change

Accuracy: < ±0.1% of span (including linearity, hysteresis and repeatability)

Loop Resistance: $R_{max} (\Omega) = (V_{supply} - 10)/0.02$

Temperature Stability: < ±0.015% of span/°C



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Ambient Temperature Range: -20 to 70°C (-4 to 158°F), 5 to 95% RH

Storage Temperature Range: -30 to 85°C (-22 to 185°F)

Enclosure: Polycarbonate, IP40 protection

Terminal Housing: Polycarbonate, IP20 protection

Mounting: 35 mm DIN rail

Dimensions: 90 H x 17.5 W x 58 mm D (3.54 x 0.7 x 2.28")

Weight: 70 g (2.5 oz)

To Order	
Model No.	Description
DRA-RTT-2	Non-isolated RTD input signal conditioner
iDRN-PS-1000	Power supply, 95 to 240 Vac input, 24 Vdc @ 1 A output

Comes complete with operator's manual.

Ordering Example: DRA-RTT-2, non-isolated RTD input signal conditioner and OCW-2 OMEGACARESM 2-year extended warranty for DRA-RTT-2 (adds 2 years to standard 1 year warranty) and iDRN-PS-1000 power supply.

OMEGACARESM extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARESM covers parts, labor and equivalent loaners.