

DRA-RTT-2 DIN Rail Mount 2-Wire RTD Input Signal Conditioner



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

Model DRA-RTT-2 is a non-isolated signal conditioner that accepts 100 Ohm Platinum RTD input and converts this into a 4-20 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 4-20 mA output without disturbing the actual process loop.

Specifications

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

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

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

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

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

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

Sensor Excitation: < 1 mA

Output: 4-20 mA

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

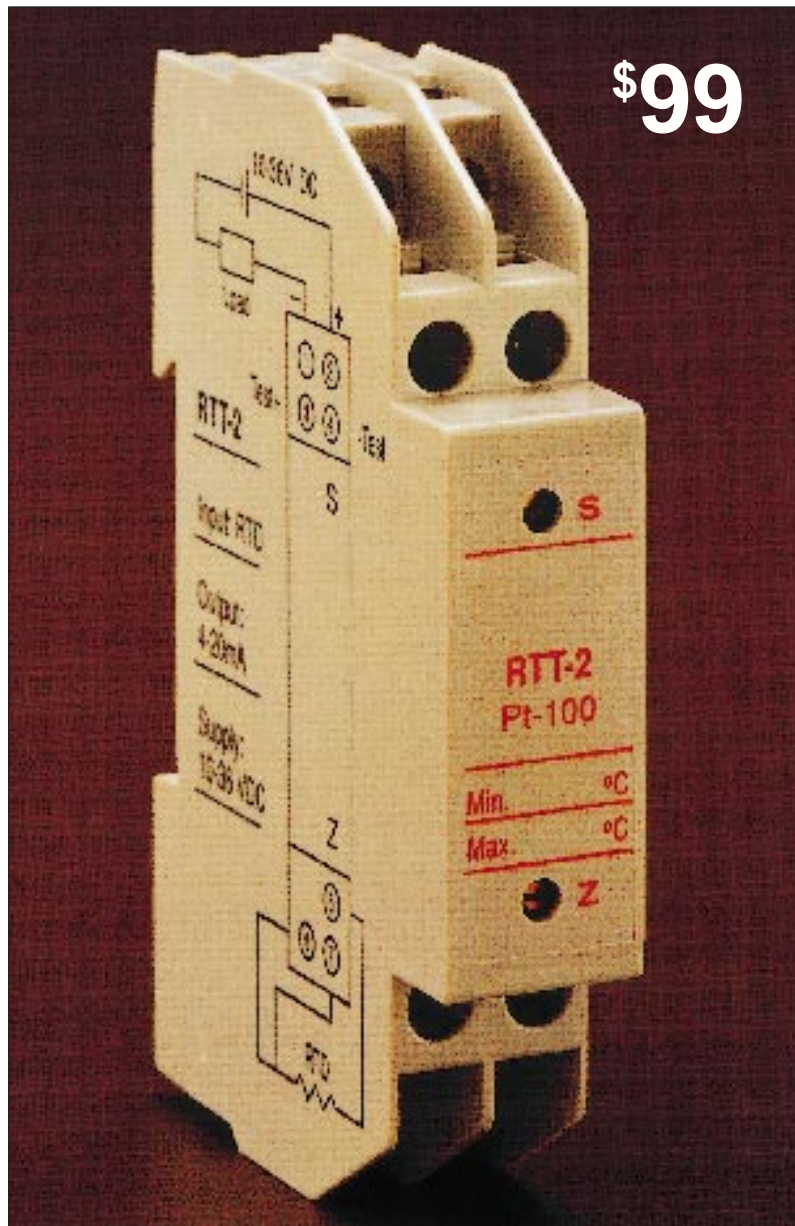
Supply Voltage: 10-36 Vdc

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

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

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

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



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

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

Enclosure: polycarbonate, IP40 protection

Terminal Housing: polycarbonate, IP20 protection

Mounting: 35 mm DIN rail

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

Weight: 2.5 oz (70 g)

To Order (Specify Model Number)		
Model No.	Price	Description
DRA-RTT-2	\$99	Non-isolated RTD input signal conditioner
DRN-PS-1000	150	Power supply, 95-240 Vac input, 24 Vdc @ 1 A output

Comes with complete operators manual.

Ordering Example: DRA-RTT-2 non-isolated RTD input signal conditioner with DRN-PS-1000 power supply, \$99 + 150 = \$249.



UNITED STATES

www.omega.com
1-800-TC-OMEGA
Stamford, CT.

CANADA

www.omega.ca
Laval(Quebec)
1-800-TC-OMEGA

GERMANY

www.omega.de
Deckenpfronn, Germany
0800-8266342

UNITED KINGDOM

www.omega.co.uk
Manchester, England
0800-488-488

FRANCE

www.omega.fr
Guyancourt, France
088-466-342

CZECH REPUBLIC

www.omegaeng.cz
Karviná, Czech Republic
596-311-899

BENELUX

www.omega.nl
Amstelveen, NL
0800-099-33-44



More than 100,000 Products Available!

• Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Glass Bulb Thermometers, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders Relative Humidity Measurement Instruments, RTD Probes, Elements and Assemblies, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples Thermowells and Head and Well Assemblies, Transmitters, Wire

• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters