

NEWPORT®

RTD Signal Conditioners

iD Series



Patented

\$250
iDRX-RTD

- ✓ 100Ω Pt, 500Ω Pt, 1000Ω Pt RTDs
- ✓ 0.1°C Resolution
- ✓ ±0.5°C Accuracy
- ✓ 1800 V Isolation
- ✓ Free Setup and Configuration Software
- ✓ Factory Setup and Configuration Available at No Charge (for iDRN Analog Output models)

The **iDRN-RTD** and **iDRX-RTD** signal conditioners provide highly accurate, stable, isolated measurement of RTD temperature sensors. Both models can accept 2, 3, or 4 wire 100Ω PT, 500Ω PT, and 1000Ω PT RTDs.

TWO MODELS: ANALOG or DIGITAL OUTPUTS

The **iDRN-RTD** provides a fully scalable analog output that is proportional to the input signal. The **iDRX-RTD** uses digital RS-485 communications.

ANALOG OUTPUT MODEL

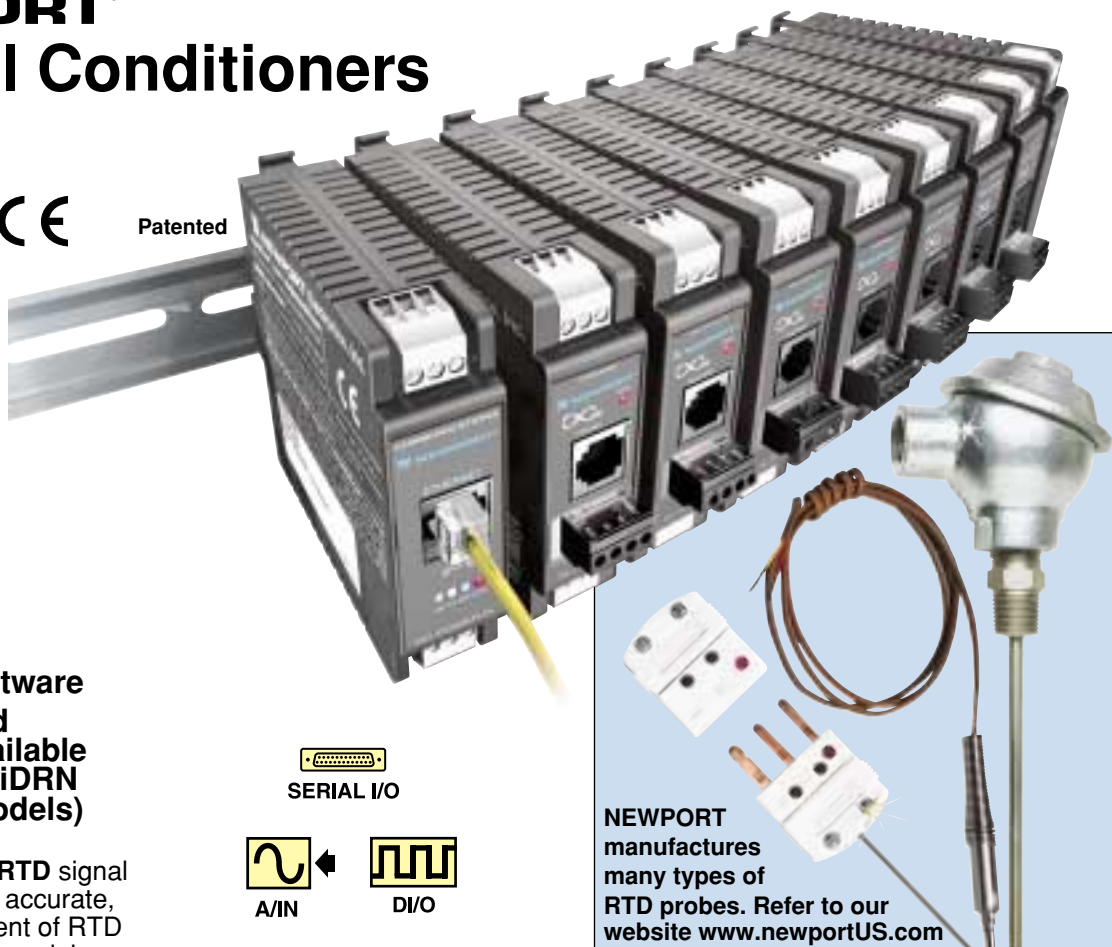
The output of the **iDRN-RTD** can be user set for 0 to 10 V, 4 to 20 mA or 0 to 20 mA. Input scaling and configuration of other operating parameters is accomplished by connecting to a standard RS-232 port of a personal computer and using the Windows-based setup software. Once configured the settings may be stored in non-volatile memory and the unit disconnected from the PC.

Factory Setup and Configuration at No Extra Charge (iDRN Analog Output Model)

Please Specify:

Type & Resistance
Temperature High & Low
Output Value High & Low

Example: Type Pt100; 0.00385;
4-wire; 0°C = 4 mA, 100°C = 20 mA



SERIAL I/O

A/I/N D/I/O

NEWPORT manufactures many types of RTD probes. Refer to our website www.newportUS.com

DIGITAL OUTPUT MODEL

The **iDRX-RTD** is a digital signal conditioner which communicates over an RS-485 communication link using either a simple, straightforward ASCII® Serial Protocol or MODBUS Serial Protocol. Up to 32 modules may be connected to a single RS-485 port stretching up to 4,000 ft. without repeaters.

ETHERNET CONNECTION

The Optional **EIS-2** iServer module can connect up to thirty-two (32) **iDRX** RS-485 Signal Conditioners to an Ethernet network and the Internet using standard TCP/IP protocol. The iServer can also be used as a simple Serial to Ethernet "bridge" or converter to connect a single **iDRN** RS-232 device to an Ethernet network and the Internet.

Specifications

Accuracy at 25°C: ±0.5°C

Input Types: Platinum RTD, 100Ω, 500Ω or 1000Ω element (2, 3 or 4 wire, 385 or 392 curve)

Resolution: 0.1°C

Power Consumption: 2.4 W (100 mA @ 24Vdc)

Input Range: -200 to 850°C (-328 to 1562°F)

iDRX Output: 2-wire (half duplex)

RS-485 (NEWPORT® Serial Protocol and MODBUS Serial Protocol)

iDRN Output: 0-to-10 V @ 10 mA max; 0 to 20 mA or 4 to 20 mA, 10 V compliance

RTD Default settings iDRN: Input PT100, .00385, 3-wire, Range 0-1000°F; Output 4-20 mA (Custom Settings available at no charge.)

To Order (Specify Model Number)

Model No.	Price	Description
iDRX-RTD	250	Digital signal conditioner with RS-485 output for RTD Temperature Sensors
iDRN-RTD	355	Signal conditioner with analog output for RTD Temperature Sensors
-FS	Free	Factory setup and scaling

Each unit supplied with complete operator's manual.

Ordering Example: iDRN-RTD digital signal conditioner (\$355), and DB9-RJ12 connector adapter (30), \$355 + 30 = **\$385**.

For iDRN/iDRX accessories and power supplies, please see start of this section.