

# NEWPORT® RTD Signal Conditioners iD Series



**\$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

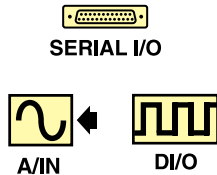
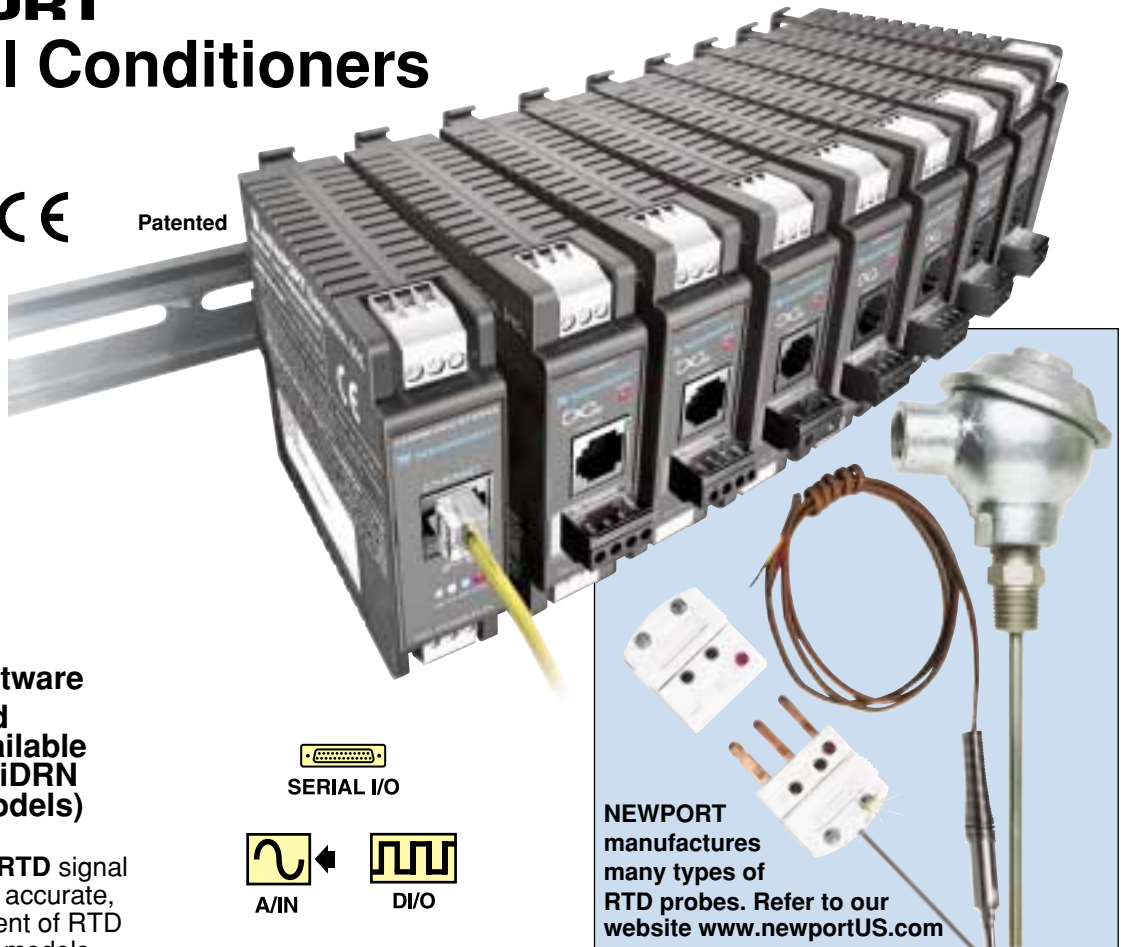
The output of the iDRN-RTD can be user set for 0 to 10 V, 4 to 20 mA or 0 to 20 mA. Input scaling and configuration of other operating parameters is accomplished by connecting to a standard RS-232 port of a personal computer and using the Windows-based setup software. Once configured the settings may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



NEWPORT manufactures many types of RTD probes. Refer to our website [www.newportUS.com](http://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.