

Process Inputs Signal Conditioners

iD Series

- ✓ Unipolar/Bipolar 400 mV to 10 Vdc, 0 to 20 mA dc
- ✓ 11 to 14-Bit Resolution
- ✓ ±0.1% FS Accuracy
- ✓ 14 Vdc Excitation
- ✓ 1800 V Isolation
- ✓ 250 Vac/1 Min. Input Overvoltage Protection (Voltage Input Only)
- ✓ Free Setup and Configuration Software
- ✓ Factory Setup and Configuration Available at No Charge (for iDRN Analog Output models)



Patented



\$275
iDRX-PR



NEWPORT manufactures many types of Pressure Transducers. Refer to our website www.newportUS.com

The iDRN-PR and iDRX-PR signal conditioners provide highly accurate, stable, isolated measurement of process signals. Both models can accept unipolar and bipolar signals from 400 mV to 10 Vdc full scale, as well as 0 to 20 mA current range. The Signal Conditioners also provide a 10Vdc or 14 Vdc reference voltage which can be used for transducer excitation.

TWO MODELS: ANALOG or DIGITAL OUTPUTS

The iDRN-PR provides a programmable analog output that is proportional to the input signal. The iDRX-PR uses a digital RS-485 Serial Communications.

ANALOG OUTPUT MODEL

The output of iDRN-PR can be user set for 0 to 10 V, 4 to 20 mA or 0 to 20 mA. Scaling and configuration is done with the free software on a PC using either the standard RS-232 port, or an Ethernet connection with the optional EIS-2 module. Once configured the settings are 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:

Input Value High & Low
Output Value High & Low
Excitation: 10 or 14 Volts dc
Ratiometric or Non-Ratiometric
Example: 0 V = 4 mA, 10 V = 20 mA,
Excitation 10 V, Non-Ratiometric

DIGITAL OUTPUT MODEL

The iDRX-PR 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: ±0.1% FS

Excitation: 14 Vdc @ 25 mA

Resolution: 11 to 14-bit

Power Consumption: 2 W (84 mA @ 24 Vdc) without excitation, 3 W (125 mA @ 24 Vdc) with excitation

Input Ranges: Uni/bipolar, 400 mV to 10 Vdc; 0 to 20 mA

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

Process Default settings DRN: Input Range 0-20mA; Output 4-20mA. Excitation 14V (Custom Settings available at no charge.)

To Order (Specify Model Number)

Model No.	Price	Description
iDRX-PR	275	Digital signal conditioner with RS-485 output for process signals
iDRN-PR	325	Signal conditioner with analog output for process signals
-FS	Free	Factory setup and scaling

Each unit supplied with complete operator's manual.

Ordering Example: iDRX-PR digital signal conditioner with RS-485 output for process signals (\$275), plus iDRN-PS-1000 power supply, 95-240 Vac input, 24 Vdc output @ 850 mA (\$150), \$275 + 150 = \$425

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