

Strain Gage/Bridge Transducer-Signal Conditioners

iD Series



\$300
iDRX-ST



NEWPORT manufactures many types of Load Cells. Refer to our website www.newportUS.com

- ✓ Unipolar/Bipolar 30 mV to 100mV
- ✓ 13-Bit Resolution
- ✓ 10 Vdc Excitation
- ✓ 0.2% FS Accuracy
- ✓ 1800 Volts Isolation
- ✓ 250 Vac/1 Min. Input
- ✓ Overvoltage Protection
- ✓ Free Setup and Configuration Software
- ✓ Factory Setup and Configuration Available at No Charge (for iDRN Analog Output models)

The iDRN-ST and iDRX-ST signal conditioners provide highly accurate, stable, isolated measurement for strain gage transducers such as load cells, torque transducers, non-amplified pressure transducers, and other bridge based transducers. Both models can accept signals from 30 to 100 mV full scale and provide 10 Vdc reference voltage which may be used for transducer excitation.

TWO MODELS: ANALOG or DIGITAL OUTPUTS

The iDRN-ST provides an analog output that is proportional to the input signal and the iDRX-ST uses RS-485 Serial Communications.

ANALOG OUTPUT MODEL

The output of iDRN-ST 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 free 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 and RS-232 signal conditioners)

Please Specify:

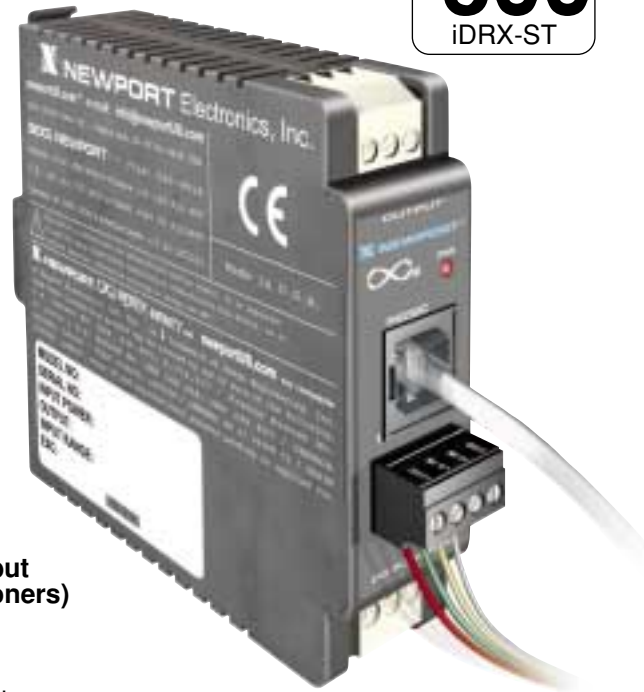
Input Value High & Low
 Output Value High & Low
 Excitation: 10 or 14 Volts dc
 Ratiometric or Non-Ratiometric
Example: 0 V = 4 mA, 100 mV = 20 mA, Excitation 10 V, Ratiometric

DIGITAL OUTPUT MODEL

The iDRX-ST is a digital signal conditioner which communicates over RS-485 communication link using either a simple ASCII Protocol or MODBUS Protocol. Up to 32 modules can be connected to a single RS-485 port stretching up to 4,000 feet 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:** ±0.2% FS
- Resolution:** 13 to 15 bit
- Excitation:** 10 V @ 30 mA
- Power Consumption:** 2 W without excitation (84 mA @ 24 Vdc), 3 W with excitation (125 mA @ 24 Vdc)
- Input Ranges:** 0 to 30 to 0 to 100 mV full scale
- 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
- Strain Default settings iDRN:** Input Range 0-30mV; Output 4-20mA. Excitation 10V Ratiometric (Custom Settings available at no charge.)

To Order (Specify Model Number)		
Model No.	Price	Description
iDRX-ST	300	Digital signal conditioner for strain gages and bridge transducers with RS-485 output
iDRN-ST	345	Signal conditioner for strain gages and bridge transducers with analog output
-FS	Free	Factory setup and scaling

Each unit supplied with complete operator's manual.

Ordering Example: iDRX-ST digital signal conditioner for strain gages and bridge transducers with RS-485 output (\$300), plus CAT-285 bi-directional RS-232-RS-485 converter for iDRX series (\$148), \$300 + 148 = \$448.

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