130-200 Series Signal Conditioners

The 130-200 Series Signal Conditioners is a full line of field configurable conditioners useful for transmitting process control setpoints to remote PID controllers or interfacing position sensors to data acquisition and control systems. Individual modules mount on DIN rails and provide 1800 Vdc isolation between input, output, and power. The field configurable input and output offers flexible, wide range capability for DC currents, AC/DC voltage, frequency, and RTD signals. Most NovaLynx sensors will directly connect to the conditioners and provide an isolated output as selected; 4 to 20 mA, 0 to 5 or 10 Vdc, 0 to 1 mA. The Q2 version provides a two channel isolated 4-20 mA current loop in proportion to two DC inputs. The 4-20mA output is loop powered from 12 to 35 Vdc, slectable input 0-.5V, 1V, 5V, 100V, 1 mA.Signal conditioners are available for the following inputs:

- DC voltage
- AC voltage
- DC output proportional to a potentiometer input
- Frequency
- Platinum and copper RTDs
- Specific for high density applications

Specifications

Input power: 9 to 30 Vdc, 1.5 W typical, 2.5 W maximum Accuracy: including linearity and hysteresis ±0.1% @ 25°C Stability: Temp <±0.025%/°C Isolation: 1800 Vdc between input, output and power Dimensions: 4.4" (112 mm) H x 3" (76 mm) D x 0.5" (12 mm) W Operating temperature range: 0 to 55°C (32 to 131°F) Storage temperature range: -25 to +70°C (-13 to +158°F) Operating humidity: 15 to 95% @ 45°C Voltage output: 0-5 V, 0-10 V (selectable) Impedance: <10 ohms Drive: 10 mA, max Current output: 0-1 mA, 4-20 mA, 0-20 mA (selectable) Impedance: >100 Kohm Compliance: 0-1 mA: 7.5 V, max (7.5K ohm) 4-20 mA: 12 V, max (600 ohm) 0-20 mA: 12 V, max (600 ohm) Input: Each conditioner supports a wide range of specific inputs that support most of the NovaLynx sensors. Consult a sales rep for specific

input specifications for each unit. Mounting: Horizontal din rail mounting is recommended

Size: 3.54"W x 4.34"D x .50"H

Ordering Information

| 130-205 | DC Voltage Input (Relative Humidity, Barometric Pressure, Solar Radiation) |
|-----------|---|
| 130-205Q2 | Loop-Powered Signal Conditioner, 2 ch (Solar Rad) |
| 130-206 | RTD Input (Temperature, Dew Point) |
| 130-207 | Potentiometer Input (Wind Direction, Evaporation) |
| 130-208 | Frequency Input (Wind Speed) |
| 130-209 | AC Voltage Input (Power Line) |
| 130-H902 | DIN Rail Power Supply, 115 Vac 24 Vdc @ 200 mA |
| 130-H910 | DIN Rail Power Supply, 115 Vac 24 Vdc @ 1000 mA |

Note: All units supplied with a section of DIN rail for mounting. Refer to section on power supplies for other suitable power sources. Refer to page on enclosures for suitable desktop or NEMA enclosures.



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130-205Q2 Loop-Powered Signal Conditioner

