

Industrial RTD Temperature Sensor with IO-Link/Switch and 4 to 20 mA Outputs

Description

The Omega PRTXI series of temperature transmitters are IO-Link capable for reliable, bi-directional, point to point communication for process data and sensor configuration; also equipped with a scalable 4-20 mA analog output and a PNP switch that can handle current draws up to 200 mA. These sensors utilize a PT100 Class A RTD element to provide an accuracy of $\pm 0.55\text{ }^{\circ}\text{C}$ throughout the entire measuring range of $-50\dots+200\text{ }^{\circ}\text{C}$ ($-58\dots+392\text{ }^{\circ}\text{F}$). Made with a fully welded 316L Stainless Steel housing, the sensor has excellent corrosion resistance and is IP69K rated. Available in standard lengths from 2 " to 12 ", with probe diameters of 1/8 ", 3/16 ", and 1/4 ", and both G and NPT process connections of 1/4 ", 3/8 ", and 1/2 ".



Features

- IO-Link / PNP switch / 4-20 mA outputs
- Scalable temperature range from -50 to $200\text{ }^{\circ}\text{C}$ (-58 to $392\text{ }^{\circ}\text{F}$)
- Designed for industrial applications
- Rugged 316L stainless steel housing

Specifications

Temperature Measuring Range:	-50 to $200\text{ }^{\circ}\text{C}$ (-58 to $392\text{ }^{\circ}\text{F}$)
Ambient Temperature Range:	-40 to $85\text{ }^{\circ}\text{C}$ (-40 to $185\text{ }^{\circ}\text{F}$)
Operating Voltage:	15 to 30 VDC (IO-Link/Switch); 10 to 30 VDC (Analog)
Accuracy:	Full Measuring Range $\pm 0.55\text{ }^{\circ}\text{C}$ ($0.99\text{ }^{\circ}\text{F}$) Scaled Measuring Range $\pm [0.215\text{ }^{\circ}\text{C}$ ($0.39\text{ }^{\circ}\text{F}$) + $0.134\text{ }^{\circ}\text{C}$ x (Measuring Span)]
Output:	IO-Link Communication / PNP Switch (200 mA) / Analog 4-20 mA
Response Time (Water):	T90 = 2 sec (1/8 " dia); 2 sec (3/16 " dia); 4 sec (1/4 " dia)
Housing Construction:	316L Stainless Steel, IP67/IP68/IP69K rated
Certifications:	CE, UKCA
Probe Lengths:	2 ", 3 ", 4 ", 6 ", 12 " (custom lengths available upon request)
Process Connection Sizes:	1/4 " NPT, 3/8 " NPT, 1/2 " NPT; G 1/4 ", G 3/8 ", G 1/2 "

Example Model No.

Example Description

PRTXI-1/4N-1/8-6-IO

RTD Temperature Transmitter, 1/4 " NPT Process Connection, 1/8 " Probe Diameter, 6 " Probe Length