

# PRTXI and PRTXS Series Temperature Transmitters



## IO-Link / switch & 4-20 mA output in one sensor

Omega's new RTDs with IO-Link AND 4-20 mA outputs offer more configuration and higher temperature ranges than alternatives. Future proof your processes with a sensor that can easily switch from 4-20 mA to IO-Link, which brings a digital signal that offers superb data transfer and no external influence of the signal. With easy installation and fast lead times, you get a superior product installed in your process quickly.

## Key Benefits & Features

- PT100 Class A RTD element provides an accuracy of  $\pm 0.55\text{ }^{\circ}\text{C}$  ( $\pm 0.99\text{ }^{\circ}\text{F}$ ) throughout the entire measuring range
- 4-pin M12 connector for quick and easy installation
- Fully welded 316L stainless steel housing with a variety of process connections and probe lengths
- IP69 rated; excellent corrosion resistance and suitable for washdown environments
- User-friendly communication via IO-Link along with 4-20 mA analog output

## Available in Industrial and Sanitary options

**Temperature Range:** -50 to 200 °C (-58 to 392 °F)

### Accuracy:

**Full Scale:**  $\pm 0.55\text{ }^{\circ}\text{C}$  ( $\pm 0.99\text{ }^{\circ}\text{F}$ )

### 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, analog 4-20 mA\*, and PNP switched (200 mA)\*

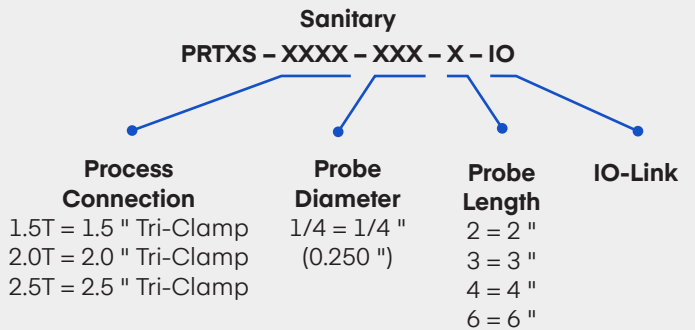
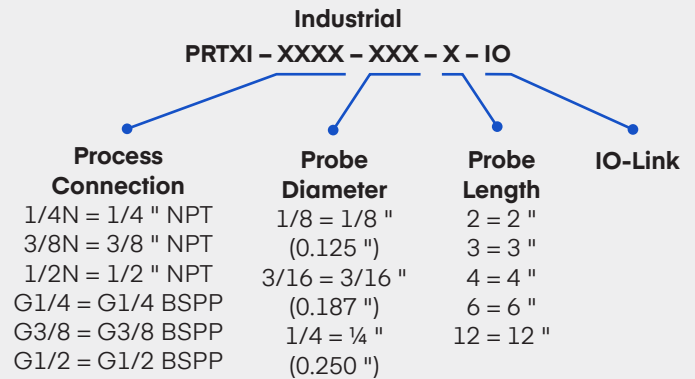
**Operating Voltage:** 15 to 30 VDC (IO-Link/Switch); 10 to 30 VDC (Analog)

**Housing Material:** 316L stainless steel, IP67/IP68/IP69K

**Ambient Operating Temperature Range:** -40 to 85 °C (-40 to 185 °F)

**Response Time (Water):** T90 = 2 sec (1/8 " dia); 2 sec (3/16 " dia); 4 sec (1/4 " dia)

## Part Number Breakdown



Optional calibration certificates available for order.

	Industrial (PRTXI)	Sanitary (PRTXS)
<b>Process Connections</b>	BSPP and NPT: 1/4 ", 3/8 ", 1/2 "	1.5 ", 2.0 ", 2.5 " Tri-clamp
<b>Certifications</b>	CE, UKCA	CE, UKCA, 3-A, EHEDG
<b>Standard Probe Lengths**</b>	2, 3, 4, 6, 12 "	2, 3, 4, 6 "
<b>Probe Diameters</b>	1/8 ", 3/16 ", and 1/4 "	1/4 "

\* Analog and switched outputs are configurable through IO-Link. \*\* Lengths are configurable upon request.



## Benefits of IO-Link

### Simplified Installation

M12 connection technology means junction boxes are no longer required, and cable ends don't need to be stripped/ crimped/wired.

### Easy Sensor Replacement

Automated parameter setting means device parameters can be stored, and automatically downloaded to new or replacement sensors.

### Get More Information

Far more information can be received from the sensor, such as device identification, parameters, diagnostic data, and process data.



## Common Industrial Applications

### Industrial Automation

- Condition monitoring for pumps
- Heat exchangers
- Hydraulic systems
- Coolants and water-based media
- Cooling circuits

### Automotive

- Oil & coolant monitoring for machine condition
- Machine tool

### Reduced Cost

PLC cabinets can be smaller, there is less cabling required, and less unplanned downtime due to quicker sensor replacement.

### Guaranteed Compatibility

If a sensor is IO-Link compliant it is guaranteed to work in any IO-Link system, regardless of type or manufacturer.



## Common Sanitary Applications

### Food & Beverage

- Clean in Place (CIP)
- Filling machines
- Vessel monitoring
- Baking/oven temperature
- Dairy processing & pasteurization

### Pharmaceutical/Personal Care

- Clean in Place (CIP)
- Steam/Sterilize in Place (SIP)