

IntelliTrace

Wireless Temperature Sensing Solutions

- Seamlessly Integrates with ITLS & ITAS Heat Trace Control Systems
- Line or Ambient Sensing
- Ordinary and Hazardous Locations
- **WirelessHART** Certified
- Ideal for New Installations, Expansions & System Upgrades
- Local or Remote Locations
- Added Redundancy & Improved Safety
- **Process Temperature Control Optimization**
- **System Testing Flexibility**
- **Industry Leading Components**
- **360° Pipe or Structure Mounting**



Wireless Temperature Transmitter



ITLS/ITAS IntelliTrace Heat Trace Control System



WirelessHART

Description

Wireless is rapidly becoming the preferred sensing technology of choice in many commercial and industrial systems. Wireless sensing can greatly reduce installation costs and more easily solve geographically and structurally challenging sensing applications. Chromalox now provides fully integrated Wireless Temperature Sensing Solutions for Heat Trace applications in ordinary and hazardous areas. Whether you are designing a new heat trace system, expanding an existing one or need to optimize your process, and you are considering wireless temperature sensing, the Chromalox IntelliTrace ITLS & ITAS heat trace control panels are an ideal choice.

Wireless System Overview

System

The Wireless Temperature Sensing components of the Chromalox Heat Trace system include our IntelliTrace ITLS or ITAS Control Panel, which is configured for wireless sensing, and a specified industrial Wireless Transmitter, that is paired with an appropriate temperature sensor. We vigorously field-tested and validated the highest rated and most recognized industrial components available. Full wireless temperature sensing installation details and considerations are found in our ITLS & ITAS Installation Manual, PK497.

Control Panel

When the wireless temperature sensing feature is selected, our IntelliTrace Control Panel is internally equipped with an industrial-duty **WirelessHART** certified wireless gateway, antenna and the necessary communication accessories. The panel firmware facilitates wired and wireless temperature sensor inputs seamlessly. Our large 10" (250 mm) touchscreen computer HMI distinguishes wireless circuits from wired ones. Each wireless circuit has its own sensor battery life meter. This provides three levels of remaining battery life so that you may properly plan service before it is needed.

Wireless Transmitter

Chromalox has chosen the Rosemount® 248 Wireless Temperature Transmitter, which is an industry standard in the industrial wireless community. This transmitter is **WirelessHART** certified and it may be pipe or structure mounted. The 248 Transmitter is offered in either an aluminum or polymer housing and is available with or without the universal mounting bracket.

Temperature Sensor

We have standardized on an RTD type temperature sensor. See the heat trace temperature sensor table for several heat trace sensor choices.



IntelliTrace

Wireless Temperature Sensing Solutions

(cont'd.)

Wireless Sensing Components and Accessories

Wireless Temperature Transmitter

Rosemount 248 Wireless Temperature Transmitter, USA Intrinsically Safe and Non-incendive, Aluminum or Polymer Housing, with 1/2-14 NPT Conduit Entry Size, WirelessHART, 2.4 GHz, External Omni-directional Antenna (Aluminum Housing only), 5-point Calibration, External ground lug, 60Hz & 3 Year Warranty

| Description | Part Number |
|--|-------------|
| Aluminum Housing with universal mounting bracket (248DXI5D2NSWA3WK1B5C4Q4G1WR3) | 0108-70477 |
| Aluminum Housing without universal mounting bracket (248DXI5D2NSWA3WK1C4Q4G1WR3) | 0108-70478 |
| Polymer Housing with universal mounting bracket (248DXI5P2NSWA3WP5B5C4Q4WR3) | 0108-70479 |
| Polymer Housing without universal mounting bracket (248DXI5P2NSWA3WP5C4Q4WR3) | 0108-70480 |
| Battery for 248 Wireless Transmitter with Aluminum Housing Only | 0108-70432 |
| Battery for 248 Wireless Transmitter with Polymer Housing Only | 0108-70481 |

Rosemount 248 Wireless Temperature Transmitter

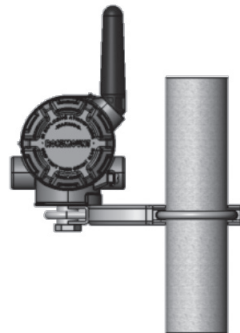


Polymer Housing

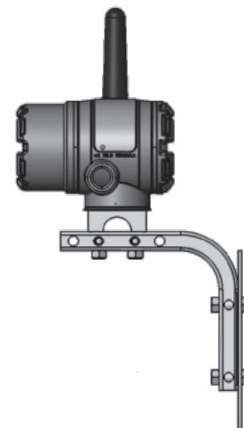


Aluminum Housing

Rosemount 248 Wireless Temperature Transmitter with Universal Mounting Bracket



Pipe Mounting



Structure Mount

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Wireless Temperature Sensing Solutions *(cont'd.)*



*RBF185M Heat Trace Sensor
Pipe Mounted with
Connection Head*

Heat Trace Temperature Sensor - 100 Ohm, 3-Wire RTD

Pipe Mounted Heat Trace Sensor with Connection Head – 316 SS Sheath, 1/2" or 3/4" NPT Connection Port.

| Model Number & Description | Part Number |
|---|-------------|
| RBF185M-HT30418RD31SB/C Aluminum - NEMA 4X | 317315 |
| RBF185M-HT30418RD91SB/C 316L Stainless Steel - NEMA 4X | 317323 |
| RBF185M-HT30418RD93SB/C Aluminum - Class I, Div's 1 & 2, NEMA 4X, IP66 | 317340 |
| RBF185M-HT30418RD94SB/C 316L Stainless Steel - Class I, Div's 1 & 2, NEMA 4X, IP66 | 399550 |

Wireless Transmitter Pipe Mounting Option

Industrial grade components for mounting the wireless transmitter onto insulated or non-insulated piping.

Note: The conduit (customer supplied) from the transmitter fitting to the sensor must be rated for the environment in which it is being installed.

| Description | | | Part Number | |
|--|------|---------------------------------------|-------------|--------|
| PIPE STANDOFF KIT, DIVISION 1 & DIVISION 2 | | | 394337 | |
| Item | Qty. | Component | Div. 1 | Div. 2 |
| A | 1 | 3/4" Seal fitting | Yes | Yes |
| B | 1 | Sealing compound & fiber | Yes | No |
| C | 1 | Pipe standoff | Yes | Yes |
| D | 2 | 3/4" x 1/2" NPT reducer with hex head | Yes | Yes |
| E | 1 | All-thread | Yes | Yes |
| F | 1 | 1/2" NPT X 1" Nipple | Yes | Yes |

Pipe Mounting Kit

