

Transmitters



PyroMATION, INC.
Quality in Every Degree®

Pyromation has provided high quality temperature sensing products to our customers for over four decades. Our (4 to 20) mA transmitter product line includes a broad offering of accurate, reliable, and flexible products in varied mounting styles. Our company motto, "Quality in Every Degree" is the guiding philosophy behind our business and is your assurance that Pyromation transmitters are easy to install, operate, and maintain. Pyromation transmitters are used in many demanding industries including Pharmaceuticals, Waste Management, Power Generation, Chemical, PetroChemical, and Food and Dairy. You can depend on Pyromation to provide high quality temperature sensing products for your standard or custom application needs.

SERIES 642 HART® FIELD TEMPERATURE TRANSMITTER



Our Series 642 HART® PC programmable Field Transmitter is a two-wire transmitter with analog output. It has measurement input for resistance thermometers (RTD) in 2, 3, or 4-wire connection, thermocouples, resistance and voltage. Available with or without a digital display, the unit can be programmed with a PC or a HART® protocol handheld communicator (275/375). The backlit LC display indicates the current measured value numerically and as a bar graph with limit value violation indicator. The Series 642 is approved by FM and CSA for Intrinsically Safe and Non-Incendive applications. It is available in General Purpose or Explosion Proof aluminum housings.

| Transmitter Series | Mounting Style | Input | Communication Protocol | PC Programmable |
|---------------------|-----------------------------------|---|------------------------|-----------------|
| 642 with display | Head or Field | Thermocouple/RTD/ Resistance/Millivolt | HART® | YES |
| 642 without display | Head or Field | Thermocouple/RTD/ Resistance/Millivolt | HART® | YES |
| 442 | Head or DIN Rail | Thermocouple/RTD/ Resistance/Millivolt | HART® | YES |
| 441 | Head or DIN Rail | Thermocouple/RTD/ Resistance/Millivolt | N/A | YES |
| 440 | Head or DIN Rail | Pt100 RTD | N/A | YES |
| 450 | Integrated with sensor package | Pt100 RTD | N/A | YES |

**Series 442
HART® Programmable**



The Series 442 programmable HART® temperature transmitter is a two-wire transmitter with an analog output. It has measurement input for resistance thermometers (RTD) in 2, 3, or 4 wire connection, thermocouples, resistance and voltage. Setting up of the transmitter is done using the 442-MODEM or HART® handheld communicator (275/375). These small units can be mounted in Pyromation DIN (Form B) heads or they can be used for surface mounting by using a 35 mm DIN rail mounting clip.

Series 441 Programmable



The Series 441 programmable temperature transmitter is a two-wire transmitter with an analog output. It has measurement input for resistance thermometers (RTD) in 2, 3 or 4 wire connection, thermocouples, resistance and voltage. Setting up of the transmitter is done using the 440-CABLE. These small units can be mounted in Pyromation DIN (Form B) heads or they can be used for surface mounting by using a 35 mm DIN rail mounting clip.

Series 440 Programmable



The Series 440 programmable RTD temperature transmitter is a two-wire transmitter with an analog output. It has measurement input for Pt100 resistance thermometers (RTD) in 2 or 3 wire connection. Setting up of the transmitter is done using the 440-CABLE. These small units can be mounted in Pyromation heads or they can be used for surface mounting by using a 35 mm DIN rail mounting clip.

Series 450 - M12 Integral Transmitter



The Series 450 integral water-tight transmitter is ideal for monitoring temperature in small areas such as tanks and pipes. These assemblies are available in threaded and clean-in-place connections. Standard units include a sensor, transmitter, and an M12 process connection housing. The RTD sensor is also available without the transmitter if required. The transmitter is a 2 wire unit with an analog output. It has measurement input for Pt100 resistance thermometers (RTD) in 4 wire connections. Setting up of the transmitter is done using the 440-CABLE and 450-ADAPTER.

| Connection Type | Galvonic Isolation (in/out) | Intrinsically Safe Approvals | Non-Incendive Approvals | Other Markings |
|-----------------|-----------------------------|------------------------------|-------------------------|---------------------------|
| 2, 3, or 4 wire | 2 kV ac | FM APPROVED SP® | FM APPROVED SP® | CE |
| 2, 3, or 4 wire | 2 kV ac | FM APPROVED SP® | FM APPROVED SP® | CE |
| 2, 3, or 4 wire | 2 kV ac | FM APPROVED SP® | FM APPROVED SP® | cRU [®] US CE |
| 2, 3, or 4 wire | 3.75 kV ac | FM APPROVED SP® | FM APPROVED SP® | cRU [®] US CE |
| 2 or 3 wire | N/A | N/A | FM APPROVED SP® | cRU [®] US CE |
| 4 wire | N/A | N/A | N/A | cRU [®] US CE A3 |