



TX Series

Transmitters for TS Series Platinum Sensors

Description

The TX Series are temperature transmitters designed to provide a 4 to 20 mA signal proportional and linear to the sensed temperature.

The TX Series features:

- Temperature sensor input of either 100 or 1000 Ω platinum RTD
- A variety of factory calibrated ranges
- Able to be field calibrated with a minimum span of 25°F and a maximum span of 400°F - starting point no lower than -25°F and no higher than +375°F
- Two or three-wire sensor inputs
- Two-wire 4 to 20 mA linear output
- Loop-powered
- Superior level of radio frequency and electromagnetic interference rejection
- Optimum flexibility and reliability

Specifications

General

Accuracy: +/- 0.1% of span @ 32°F (0°C) transmitter only
Input sensor: 100 or 1000 Ω platinum RTD with temperature coefficient of 0.00385 $\Omega/\Omega/^\circ\text{C}$, jumper selectable
Input: 2- or 3-wire
Zero and span adjustment: Non-interacting

Environmental

Operating temperature: 32 to 158°F (0 to 70°C)
Operating humidity: 0 to 100% RH, non-condensing
Storage temperature: 14 to 176°F (-10 to 80°C)

Electrical

Supply voltage: 8 to 35 VDC
Input voltage effect: +/- 0.001% of span/volt
Output: 4 to 20 mA DC, 2-wire
Maximum over-current: 25 mA
Radio frequency interference effect: +/-0.5% FSO @ 27 MHz
Electromagnetic interference effect: +/-0.1% FSO
Polarity protection: Diode protected

Additional TX1600 Series Specifications

Sensing element: 1000 Ω Platinum RTD
Sensor accuracy: PtRTD: +/- 0.1% @ 32°F (0°C)
Sensor operating temperature: -50 to 375°F (-45.56 to 190.56°C)

Specifications subject to change without notice.

Ordering Information

Part No.	Descriptions
TX1500	40 to 90°F span, transmitter only
TX1501	-40 to 160°F span, transmitter only
TX1502	0 to 100°F span, transmitter only
TX1503	50 to 150°F span, transmitter only
TX1504	40 to 240°F span, transmitter only
TX1505	0 to 150°F span, transmitter only
TX1506	20 to 120°F span, transmitter only
TX1507	-30 to 130°F span, transmitter only
TX1508	50 to 85°F span, transmitter only
TX1509	40 to 140°F span, transmitter only
TX1510	100 to 250°F span, transmitter only

Custom ranges are available for special applications.

TX1600	40 to 90°F span, transmitter with matched 1000 Ohm platinum RTD sensor
TX1601	-40 to 160°F span, transmitter with matched 1000 Ohm platinum RTD sensor
TX1602	0 to 100°F span, transmitter with matched 1000 Ohm platinum RTD sensor
TX1603	50 to 150°F span, transmitter with matched 1000 Ohm platinum RTD sensor
TX1604	40 to 240°F span, transmitter with matched 1000 Ohm platinum RTD sensor

TX Series Accessories

QE50	RTD simulator, 100 Ω platinum IEC 751
QE51	RTD simulator, 1000 Ω platinum IEC 751
TS Series	Platinum temperature sensors

Dimensions

Note: inches [mm]

TX Series

