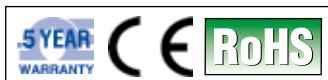




# Thermistor Temperature Transmitter

## “Smart” In-Head Transmitter

TX206TH



- ✓ Supports Many Thermistor Types
- ✓ 2-Wire, Loop Powered
- ✓ 4 to 20 mA Output
- ✓ PC Configurable Ranges (Requires Programmer)
- ✓ High Stability
- ✓ Free Configuration Software Download

The TX206TH is a cost effective “smart” in head transmitter that accepts thermistor temperature sensors and converts sensor output over a configured range to a standard industrial (4 to 20) mA transmission signal.

A variety of thermistor types are available when using the configuration software: select thermistor type, temperature range, units and burnout direction, without requiring calibration equipment.

PC configuration is performed quickly using our new USB port driven configurator by simply connecting two clips to the TX206TH loop terminals and following the software instructions. Calibration set-up may be saved as a file on the PC for later use.

Alternatively, a single pushbutton and LED indicator allows the user to configure transmitter range against a manually set input condition. A red LED is included to help guide the user. The LED also operates as a sensor error indicator.

Transmitters can be factory configured for any range specified at the time of order, removing the need for user configuration. Extra lead time is required.



TX206TH shown smaller than actual size.

### Specifications at 20°C (68°F)

#### INPUT

**Sensor Type:** Thermistor  
**Sensor Connection:** Screw terminal  
**Minimum Span:** 5°C (9°F)  
**Accuracy (Typical):** ±0.2°C, ±0.2% of reading  
**Thermal Drift:** ±0.02%/°C

#### OUTPUT

**Output Type:** 2-wire (4 to 20) mA current loop  
**Output Range:** 4.0 to 20.0 mA  
**Output Connection:** Screw terminal  
**Maximum Output:** 21.5 mA  
**Minimum Output:** <3.75 mA  
**Accuracy:** mA output /2000 or 5 uA (whichever is greater)  
**Loop Voltage Effect:** 0.2 uA/V  
**Thermal Drift:** ±2 uA/°C  
**Maximum Output Load:** [(Vsupply-10)/21]KΩ; example: 666Ω @ 24V

**Thermistor Types:** Please refer to configuration software for complete up to date list: 3KB (44005, 44030), 5KB (44007, 44034), 10KB (44016, 44036) 10KH (44006, 44031), 30KH (44008), 2252KB (44004, 44033)

### General Specifications

**Response Time:** 1 second  
**Start-Up Time:** 2 seconds (I out <4 mA during start up)  
**Warm-Up Time:** 1 minute to full accuracy  
**Power Supply:** 10 to 30 Vdc  
**ENVIRONMENTAL**  
**Ambient Operating Range:** -40 to 85°C (-40 to 185°F)  
**Ambient Storage Temperature:** -50 to 90°C (-58 to 194°F)  
**Ambient Humidity Range:** 10 to 90% RH non condensing  
**PHYSICAL**  
**Dimensions:** 21 H x 43 mm Dia (0.83 x 1.7")  
**Weight:** 31 g (1 oz) (encapsulated)

| To Order      |  |
|---------------|--|
| Model No.     | Description  |
| TX206TH       | Thermistor temperature transmitter                 |
| TX206TH-UKFS  | Thermistor temperature transmitter, factory scaled |
| USB-CONFIG-TH | USB interface cable (required for user scaling)    |

Comes complete with operator's manual.

**Note:** To order with factory scaling use model number TX206TH-UKFS and advise thermistor type, range and output scaling required.