

# Field Rangeable Miniature 2-Wire Transmitters

## Isolated Models Available

**TRODEKS®**

### TX900 Series



- ✓ Thermocouple, RTD and Millivolt Input Models
- ✓ Compact Size
- ✓ 4 to 20 mA Output
- ✓  $\pm 0.1\%$  FS Accuracy
- ✓ TX903 Isolated Model (Other Models Non-Isolated)
- ✓ Mounts in Protection Head

TX900 Series transmitters feature dip switch selection of input type and range. The following models are available: TX901 (non-isolated, accepts J, K, T, E, R or S thermocouples); TX903 (isolated, accepts J, K, T, E, R or S thermocouples); TX904 (non-isolated, accepts 100  $\Omega$  Pt RTD's 2- or 3- wire); TX905 (non-isolated, millivolt input). To scale the units in the field, calibration equipment is required.

### Specifications

**Inputs:** See input types and ranges table below right

**Output Range:** 4 to 20 mA dc

**Zero Adjustment:**  $\pm 25\%$  mV span centered around 0 mV (or  $^{\circ}\text{C}$ )

RTD models  $\pm 40^{\circ}\text{F}$

**Accuracy:**  $\pm 0.1\%$  FS (includes effects of linearity, hysteresis and repeatability)

**Frequency Response:** 3 dB @ 3 Hz

**Ambient Temperature Range:**

-25 to  $85^{\circ}\text{C}$  (-13 to  $185^{\circ}\text{F}$ )

**Storage Temperature Range:**

-65 to  $125^{\circ}\text{C}$  (-85 to  $257^{\circ}\text{F}$ )

**Supply Voltage:** 9 to 35 Vdc;

24 Vdc recommended

**Max Loop**  $V_s - 8.5\text{V}$

**Resistance:** 0.020

**Isolation (TX903 only):** 500V RMS

**Dimensions:**

**TX901, TX904:** 1.90 H x 4.45 cm D (1.75 x 0.75")

**TX903, TX905, TX906:**

2.9 H x 4.45 cm D (1.13 x 1.75")

(height includes barrier strip)

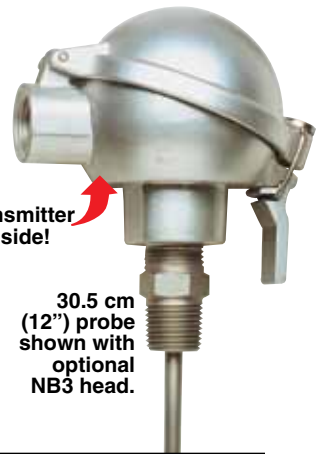
**Weight:** 30 g (1 oz); 71 g (2.5 oz) for thermocouple models

Shown actual size.



Transmitter inside!

30.5 cm (12") probe shown with optional NB3 head.



### Input Types and Ranges

Input Type and Model No.	Overall Input Range
J TX901/903	0 to $760^{\circ}\text{C}$ (0 to $1390^{\circ}\text{F}$ )
K TX901/903	0 to $1370^{\circ}\text{C}$ (0 to $2500^{\circ}\text{F}$ )
T TX901/903	0 to $400^{\circ}\text{C}$ (0 to $750^{\circ}\text{F}$ )
E TX901/903	0 to $835^{\circ}\text{C}$ (0 to $1515^{\circ}\text{F}$ )
R TX901/903	0 to $1700^{\circ}\text{C}$ (0 to $3100^{\circ}\text{F}$ )
S TX901/903	0 to $1760^{\circ}\text{C}$ (0 to $3210^{\circ}\text{F}$ )
RTD TX904-1	0 to $260^{\circ}\text{C}$ (0 to $500^{\circ}\text{F}$ )
RTD TX904-2	0 to $538^{\circ}\text{C}$ (0 to $1000^{\circ}\text{F}$ )
mVTX905	4 to 64 mV
V VTX906-V1	0.04 to 0.64V
V VTX906-V2	0.4 to 6.4V
V VTX906-V2	4 to 64V

† Note: Factory setting; TX901 Type J 0-500 $^{\circ}\text{F}$ , TX903 Type J 0 to 500 $^{\circ}\text{F}$ , TX904-1 0 to 300 $^{\circ}\text{F}$ , TX904-2 0 to 500 $^{\circ}\text{F}$ , TX905 0 to 50 mV.

### To Order

Model No.	Description
TX901	J, K, T, E, R, S thermocouple input, non-isolated
TX903	J, K, T, E, R, S thermocouple input, isolated
TX904-1	100 $\Omega$ Pt RTD input (a = 0.00385), non-isolated
TX904-2	100 $\Omega$ Pt RTD input (a = 0.00385), non-isolated
TX905	Millivolt input, 4 to 64 mV non-isolated
TX906-V1	Volt input, 0.04 to 0.64V non-isolated
TX906-V2	Volt input, 0.4 to 6.4V non-isolated
TX906-V3	Volt input, 4 to 64V non-isolated
NB1TX901-(*)	NB1 thermocouple probe, 30.5 cm (12") L, 1/4" OD, ungrounded junction, 304 SS sheath, with TX901 transmitter
NB1TX903-(*)	NB1 thermocouple probe, 30.5 cm (12") L, 1/4" OD, ungrounded, 304 SS sheath, with TX903 transmitter
PRTX904-1	PR-12 RTD probe, 30.5 cm (12") L, 1/4" OD, 304 SS sheath, with TX904-1 transmitter
PRTX904-2	PR-12 RTD probe, 30.5 cm (12") L, 1/4" OD, 304 SS sheath, with TX904-2 transmitter
TX-SCALED	Scaling charge for factory set up of range (specify input type and range from chart above)