

Field Rangeable Miniature 2-Wire Transmitters

Isolated Models Available

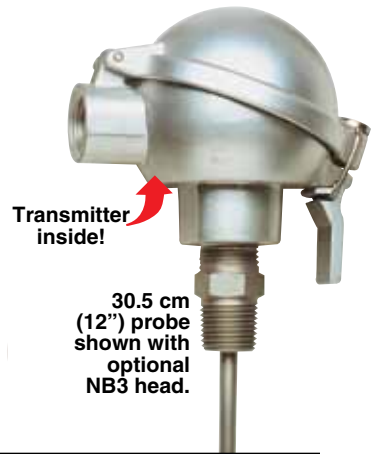
TX900 Series



Additional power supplies available, visit omega.com for details



Shown actual size.



Transmitter inside!

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

- ✓ Thermocouple, RTD and Millivolt Input Models
- ✓ Compact Size
- ✓ 4 to 20 mA Output
- ✓ ±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 Ω 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: ±25% mV span centered around 0 mV (or °C)

RTD models ±40°F

Accuracy: ±0.1% FS (includes effects of linearity, hysteresis and repeatability)

Frequency Response: 3 dB @ 3 Hz

Ambient Temperature Range:

-25 to 85°C (-13 to 185°F)

Storage Temperature Range:

-65 to 125°C (-85 to 257°F)

Supply Voltage: 9 to 35 Vdc;

24 Vdc recommended

Max Loop $V_s - 8.5V$

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

Input Types and Ranges

Input Type and Model No.	Overall Input Range
J TX901/903	0 to 760°C (0 to 1390°F)
K TX901/903	0 to 1370°C (0 to 2500°F)
T TX901/903	0 to 400°C (0 to 750°F)
E TX901/903	0 to 835°C (0 to 1515°F)
R TX901/903	0 to 1700°C (0 to 3100°F)
S TX901/903	0 to 1760°C (0 to 3210°F)
RTD TX904-1	0 to 260°C (0 to 500°F)
RTD TX904-2	0 to 538°C (0 to 1000°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°F, TX903 Type J 0 to 500°F, TX904-1 0 to 300°F, TX904-2 0 to 500°F, TX905 0 to 50 mV.

To Order Visit omega.com/tx900 for Pricing and Details

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 Ω Pt RTD input (a = 0.00385), non-isolated
TX904-2	100 Ω 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)

* Insert thermocouple type J, K, T or E. Contact our custom engineering department for pricing on R or S thermocouples, which are available by special order. Comes complete with operator's manual.

Notes: (1) Thermocouple model output proportional to mV output of thermocouple. Not linearized to temperature. (2) For non-isolated units use ungrounded probes. Thermocouple or RTD input simulation required to scale output for a particular range. To order unit scaled by OMEGA specify input type, low end of range, high end of range and °F or °C. Specify: **TX-SCALED**.

Ordering Example: TX901, non-isolated thermocouple transmitter.