



Ultra-Miniature Temperature Transmitters Thermocouple or RTD

TX93A
Starts at
\$74



Shown smaller than actual size.



Transmitter inside!

- ✓ ±0.1% FS Accuracy
- ✓ 4 to 20 mA DC Output
- ✓ Only 35.6 mm (1.4") Dia
- ✓ Upscale Break Protection
- ✓ J, K, T, or E Thermocouple Input
- ✓ 100 Ω Platinum RTD Input

Specifications

Output Range: 4 to 20 mA DC
Zero and Span Adjustment Range: ±25%
Accuracy: ±0.1% FS (includes effects of linearity, hysteresis and repeatability)
Frequency Response: 3 dB @ 3Hz
Ambient Temp. Range: -25 to 85°C (-13 to 185°F)
Storage Temp. Range: -65 to 125°C (-85 to 257°F)
Supply Voltage: 8 to 35 Vdc; 24 Vdc recommended
 Max Loop $\frac{V_s - 8 V}{0.020 A}$
Resistance: 0.020 A
Dimensions: 23.6 H x 35.6 mm D (0.93 x 1.40") (height includes terminal strip)
Weight: 15 g (0.53 oz), 25 g (0.8 oz) if epoxy-potted

OMEGA® ultra-miniature temperature transmitters convert millivolt inputs from thermocouples or resistance from RTDs into 4 to 20 mA outputs. Transmitters are available in color-coded enclosures covering the four most popular thermocouple types (J, K, T, and E) as well as 3-wire 100 Ω Platinum RTDs.

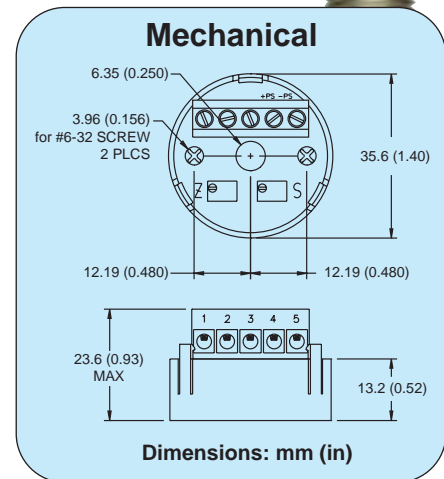
Featuring state-of-the-art integrated circuits and electronic design, these ultra-compact transmitters have a diameter of only 35.6 mm (1.40") and are designed to fit inside many compact thermowell protection heads, such as the OMEGA® NB2.

TX93A and TX94A transmitters can eliminate long runs of costly field wiring in a variety of applications.

A stable 4 to 20 mA output signal is produced proportional to the transmitter's specific input type and calibrated temperature range (see Range Code table, right).

Adjustability of ±25% for zero and span is provided to facilitate some rangeability. The transmitted signal eliminates noise pickup, voltage drops, and multiple cold junction errors, and it requires only a twisted pair of copper wires for loop connections.

All models and ranges of these ultra-miniature transmitters are available with fully epoxy-potted electronics (specify "-P" option), which give ultimate protection in extreme environments.



Dimensions: mm (in)

MOST POPULAR RANGES HIGHLIGHTED!

To Order (Specify Model Number)		
Model No.	Price	Description
TX93A-*	\$74	Thermocouple transmitter (J, K, T or E)
TX94A-*	90	RTD transmitter (100 Ω Pt, alpha = 0.00385)
-P	15	Fully epoxy-potted electronics for extreme environments
-FS	25	Special factory scaling

*Insert range code from chart below.

Range Codes

TX93A				TX94A	Range °C (°F)
J	K	T	E	RTD	
J1			E1	1	-40 to 49 (-40 to 120)
J2	K2	T2	E2	2	-18 to 93 (0 to 200)
J3	K3	T3	E3	3	-18 to 149 (0 to 300)
J4	K4	T4	E4	4	-18 to 260 (0 to 500)
J5	K5	T5	E5	5	-18 to 399 (0 to 750)
J6	K6		E6	6	-18 to 538 (0 to 1000)

Notes: (1) Thermocouple models, output proportional to mV output of thermocouple. Not linearized to temperature. (2) Non-isolated unit for use with ungrounded probes. (3) Each unit supplied with complete operator's manual.

Ordering Examples: TX93A-J4, Type J, transmitter with -18 to 260°C (0 to 500°F) range, \$74. TX93A-K2-P, epoxy-potted Type K, transmitter with -18 to 93°C (0 to 200°F) range, \$74 + 15 = \$89.

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