

Miniature Temperature Transmitters

Thermocouple or RTD (Pt100) Input

- ✓ Metal Case, RFI Shield
- ✓ 2-Wire Transmitter
- ✓ 4 to 20 mA Output
- ✓ ±0.1% FS Accuracy
- ✓ Upscale Break Protection
- ✓ Non-Isolated
- ✓ Mounts in Protection Head

TX90 Series



IS/I/1/ABCD
 NI/I/2/ABCD
 TX91 & TX92
 Entity
 Parameters
 Vmax = 30 V
 Imax = 150 mA
 Ci = 0µf

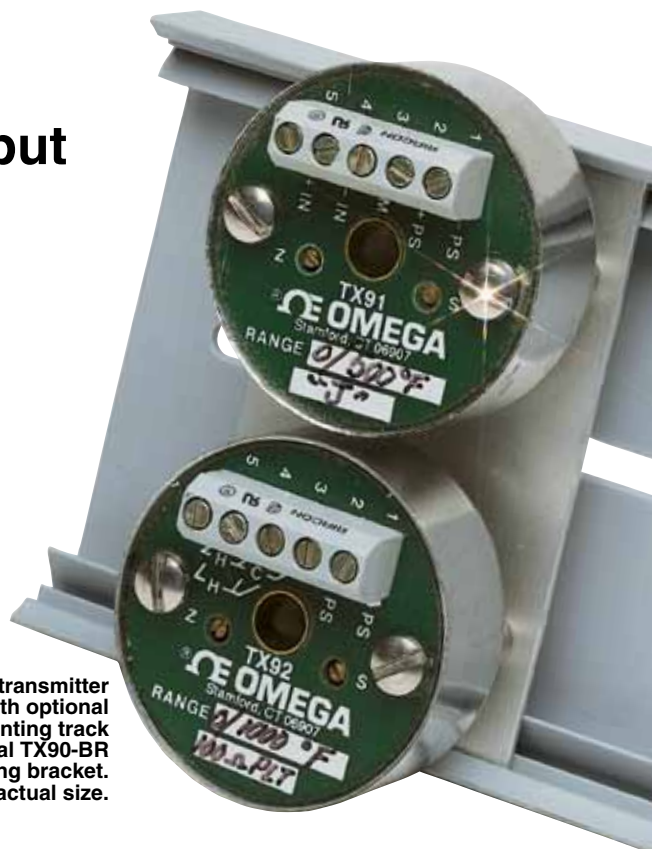
The economical OMEGA® TX91 and TX92 2-wire transmitters provide an output current of 4 to 20 mA, and are proportional to the mV signal of a thermocouple or to a 2- or 3-wire RTD sensor input. The TX91 or TX92 are very compact and can mount directly within the OMEGA NB1 cast iron protection head. By having the transmitter near the sensor, the effects of electrical noise can be minimized and long runs of thermocouple wire can be eliminated.

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) referenced to the mV input
- Ambient Temperature Range:** -32 to 85°C (-25 to 185°F)
- Storage Temperature Range:** -65 to 90°C (-85 to 193°F)
- Supply Voltage:** 11 to 44 Vdc; 24 Vdc recommended
- Max Loop Resistance:** $\frac{V_s - 11 V}{0.020A}$
- Dimensions:** 29 H x 45 mm D (1.125 x 1.75") (height includes terminal strip)
- Weight:** 50 g (1.5 oz)



NB1TX shown with optional thermowell.



TX92-6 transmitter shown with optional RT mounting track and optional TX90-BR mounting bracket. Shown actual size.

To Order	
Model No.	Description
TX91-(*)	Thermocouple transmitter (J, K, T or E)
TX92-(*)	RTD transmitter (100 Ω, Pt 0.00385)
NB1TX-(*)	NB1 thermocouple probe, 305 mm (12") L, 1/4" OD, ungrounded junction, 304 SS sheath, with TX91 transmitter
PRTX-(*)	PR-12 RTD probe, 305 mm (12") L, 1/4"

* Insert range code from chart below.

Accessories

Model No.	Description
PSR-24S	Regulated power supply, US plug, 90 to 264 Vac input, 24 Vdc output, 400 mA, screw terminals, UL
PSR-24L	Regulated power supply, US plug, 90 to 264 Vac input, 24 Vdc output, 400 mA, stripped leads, UL
PSR-24L-230	Regulated power supply, European plug, 230 Vac input, 24 Vdc output, 400 mA, stripped leads, CE
PSU-93	Unregulated power supply, 16 to 23 Vdc, 300 mA max, screw terminal
TX82B	Process loop-powered indicator (see omega.com)
RT	1.2 m (48") mounting track
TX90-BR	Mounting bracket for RT mounting track
TX90-DIN	DIN rail mounting adaptor
RAIL-35-2	2 m (6.6') section 35 mm DIN rail

Comes complete with operator's manual.

Ordering Example: NB1TX-K6, TX91 transmitter for Type K thermocouple, 0 to 1000°F output range. Transmitter housed in NB1-CASS-14U-12 Type K probe.

For complete information on NB1 thermocouple probes and PR-12 RTD probes, see omega.com

Model Number					Range °C (°F)
TX91				TX92	
J	K	T	E	RTD	
-	-	-	-	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	-	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 T/C. Not linearized to temperature. (2) Non-Isolated unit for use with ungrounded probes.