

Miniature Temperature Transmitters

Thermocouple or RTD 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
Starts at
\$188



LR-88118
IS/1/ABCD
NI/1/2/ABCD
TX91 & TX92
Entity Parameters
Vmax = 30 V
Imax = 150 mA
Ci = 0µf
Li = 0mH

Optional mounting bracket, TX90-BR, \$18.



Optional mounting track, RT, \$14, shown actual size.

The economical OMEGA® TX91 and TX92 2-wire transmitters provide an output current of 4 to 20 mA, and is proportional to the mV signal of a thermocouple or to a 2- or 3-wire RTD sensor input.

The TX91 or TX92 is very compact and can mount directly within OMEGA's 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: $\frac{V_s - 11 V}{0.020 A}$

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, \$237.

Range Codes

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.

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)		
Model No.	Price	Description
TX91-(*)	\$188	Thermocouple transmitter (J, K, T or E)
TX92-(*)	188	RTD transmitter (100 Ω, Pt 0.00385)
NB1TX-(*)	237	NB1 thermocouple probe, 12" L, 1/4" OD, ungrounded junction, 304 SS sheath, with TX91 transmitter
PRTX-(*)	278	PR-12 RTD probe, 12" L, 1/4" OD, 304 SS sheath, with TX92 transmitter

*Insert range code from chart below. Comes with complete 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, \$237.

For complete information on NB1 thermocouple probes and PR-12 RTD probes, see Sections A and C.

Accessories

Model No.	Price	Description
TX90-BR	\$18	Mounting bracket
PSR-24S	60	Regulated power supply, US plug, 90 to 264 Vac input, 24 Vdc output, 400 mA, screw terminals, UL
PSR-24L	60	Regulated power supply, US plug, 90 to 264 Vac input, 24 Vdc output, 400 mA, stripped leads, UL
PSR-24L-230	60	Regulated power supply, European plug, 230 Vac input, 24 Vdc output, 400 mA, stripped leads, CE
PSU-93	40	Unregulated power supply, 16 to 23 Vdc, 300 mA max, screw terminal
TX82B	150	Process loop-powered indicator (see TX82B)
RT	20	1.2 m (48") mounting track
TX90-DIN	27.50	DIN rail mounting adaptor
RAIL-35-2	15	2 m (6.5') section 35 mm DIN rail

omega.co.uk®

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622 | Fax +44(0) 161 777 6622 | Sales@omega.co.uk

www.omega.co.uk



UNITED STATES

www.omega.com

1-800-TC-OMEGA
Stamford, CT.

UNITED KINGDOM

www.omega.co.uk

Manchester, England
0800-488-488
+44-(0)161-777-6611

CANADA

www.omega.ca

Laval(Quebec)
1-800-TC-OMEGA

FRANCE

www.omega.fr

0800-466-342

GERMANY

www.omega.de

Deckenfronn, Germany
0800-8266342

BENELUX

www.omega.nl

0800-099-33-44



More than 100,000 Products Available!

• Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples, Thermowells and Head and Well Assemblies, Transmitters, Thermocouple Wire, RTD Probes

• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485, Ethernet and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters