

Weather Resistant Temperature-to-Wireless Transmitters For Thermocouples

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UWTC-2A-NEMA



- ✓ Transmit Temperature Data Wirelessly to Your Computer or the Internet
- ✓ Transmit up to 120 m (400')
- ✓ Weather Resistant NEMA 4X (IP65) Enclosure

- ✓ Software Selectable for 9 Thermocouple Input Types
- ✓ Transmit Data in Real Time
- ✓ Compatible with UWTC-REC Wireless Receivers
- ✓ Low Power Operation and Sleep Mode

The OMEGA® weather resistant temperature-to-wireless transmitters are weather-resistant, battery-powered transmitters that transmit their readings back to a host receiver up to 120 m (400') away. UWTC units can be programmed for any of 9 thermocouple calibrations. The UWTC will transmit the measured and ambient temperatures, along with RF signal strength and battery condition to a remote host, such as the UWTC-REC Series. You can program the UWTC to transmit your data at rates from 2 sec to 2 min.

Data received by the UWTC-REC can be received and displayed on your computer, using the TC Central software included with each

compatible receiver. TC Central software can turn your PC into a strip chart recorder or data logger so readings can be saved and later printed or exported to a spreadsheet file.

Specifications:

Available Thermocouple Input Types:
J, K, T, E, R, S, B, C or N

Thermocouple Measurement Range:

- J:** -100 to 760°C (-148 to 1400°F)
- K:** -100 to 1260°C (-148 to 2300°F)
- T:** -200 to 400°C (-328 to 752°F)
- E:** -200 to 1000°C (-328 to 1832°F)
- R:** 260 to 1760°C (500 to 3200°F)
- S:** 260 to 1760°C (500 to 3200°F)
- B:** 870 to 1820°C (1598 to 3308°F)
- C:** 0 to 2315°C (32 to 4200°F)
- N:** -100 to 1260°C (-148 to 2300°F)

Accuracy:

- J, K:** ±0.5% of reading or ±1.0°C (1.8°F), whichever is greater
- T, E, N:** ±0.5% of reading or ±2.0°C (3.6°F), whichever is greater
- R, S, B, C:** ±0.5% of full scale

Resolution: 1°C/1°F

Cold Junction Compensation (Automatic): -10 to 70°C (14 to 158°F)

Sensor Connection: Internal connection block

Operating Environment: -10 to 70°C (14 to 158°F)

Transmit Sample Rate: Programmable from 2 sec to 2 min

Radio Frequency (RF) transceiver
Carrier: ISM 2.4 GHz, direct sequence spread spectrum

RF Output Power:
10 dBm (10 mW)

Range of RF Link:
Outdoor Line of Sight:
Up to 120 m (400')
Indoor/urban:
Up to 40 m (130')

RF Data Packet Standard:
IEEE 802.15.4, open communication architecture

Power: One 3.6V, lithium "C" cell battery (included)

Battery Life (Typical): 3 years at 1 sample/minute reading rate @ 25°C

Enclosure: NEMA 4X (IP65)
Polycarbonate

Dimensions: 145.8 L x 94.7 W x 50.8 mm H (5.74 x 3.73 x 2")

Directional antenna included.

Works with all OMEGA UWTC Series Wireless Receivers. Visit us Online for Details



UWTC-REC1. Shown smaller than actual size.

USB connection (cable included)



UWTC-REC2 models are available with 4 to 20 mA, 0 to 5 Vdc, 0 to 10 Vdc or Type K thermocouple output. Mating connector and cable included. Data logging and recording software included with compatible receiver.

Laptop not included.

To Order

Model No.	Description
UWTC-2A-NEMA	Weather resistant thermocouple-to-wireless transmitter with NEMA enclosure

Accessories/Receivers

Model No.	Description
UWTC-REC1	USB powered 48-channel transmitter receiver
UWTC-REC2-(*)	48-channel receiver with analog output
UWTC-REC2-D-(*)	48-channel receiver with analog output and display
UWTC-REC3	32-channel wireless receiver with ethernet
UWTC-REC4-(*)	48-channel DIN rail receiver with 4 analog outputs and alarms
UWTC-REC6-(*)	1-channel transceiver with analog output
UWTC-CABLE	Spare USB programming/communication cable
UWM-DINRAIL	DIN rail mounting bracket assembly
BATT-C-3.6V	Replacement 3V C cell Li battery

Note: Because of transmission frequency regulations, these products may only be used in the US, Canada, Europe and China. Comes complete with antenna, 3.6V "C" battery, and operator's manual.

* Specify analog output signal: "V1" for 0 to 5 Vdc; "V2" for 0 to 10 Vdc, or "MA" for 4 to 20 mA.

Ordering Examples: UWTC-2A-NEMA, thermocouple-to-wireless transmitter, UWTC-REC2-V1, 48-channel wireless transmitter receiver, and TJ36-CASS-116U-6, heavy duty transition joint probe Type K.

UWTC-2A-NEMA, thermocouple-to-wireless transmitter, UWTC-REC1, USB powered 48-channel transmitter receiver, and TJ36-CASS-040U-6, fine diameter rugged thermocouple transition joint probes.