Weather Resistant Temperature-to-Wireless Transmitters
For Thermocouples

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.

- 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

UWTC-2A-NEMA

Visit us online for OMEGAs complete selection.
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")

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-118U-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.