Wireless RTD Probe/ Transmitter Assembly

For Use in Sanitary Applications

## **UWRTD-NB9W Series**



- Transmit Temperature Data Wirelessly to Your Computer or the Internet
- Complete Industrial Assembly—Includes Probe, Transmitter Housing/Head, Integral Wireless Transmitter and Long Life Battery
- Stainless Steel Construction with White Polypropylene Transmitter Housing
- Available with 3-A Approved Thermowells for Clean-in-Place (CIP) Applications
- ✓ Transmit up to 120 m (400')
- Included Software Converts a PC into a Multi-Channel Chart Recorder or Data Logger
- ✓ Each Wireless Connector Transmits Sensor Temperature, Ambient Temperature, Signal Strength and Battery Status in Real Time
- ✓ Low Power Operation, Sleep Mode for Long Battery Life
- ✓ Compatible with UWTC-REC Wireless Receivers, Wi Series Meter/Controller/Scanner and DIN Rail Receivers-Create 32- or 48-Channel Wireless Systems

The OMEGA® wireless RTD industrial probe assemblies for sanitary applications feature a complete, ready to install, pre-wired Pt100 sensor and wireless transmitter package. Built into the NB9W white polypropylene head is a wireless transmitter that can transmit temperature readings back to a host receiver up to 120 m (400') away. The probes transmit the measured temperature, along with the head ambient temperature, RF signal strength and battery condition to a remote host, such as the UWTC-REC Series. You can program the UWTC-NB9 to transmit your data at rates from once every 2 seconds to every 2 minutes.

Data received by the UWTC-REC can be received and displayed on your computer, using the TC Central software included with each unit. The UWTC-REC1 is a 48-channel receiver with USB connection; the UWTC-REC-2 adds an analog output that can be used to retransmit a 0 to 5 Vdc, 0 to 10 Vdc, Type K thermocouple or 4 to 20 mA signal to a remote meter, controller, PLC or data acquisition instrument. Both are available with an optional NEMA-rated enclosure. The TC Central software (included) 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.

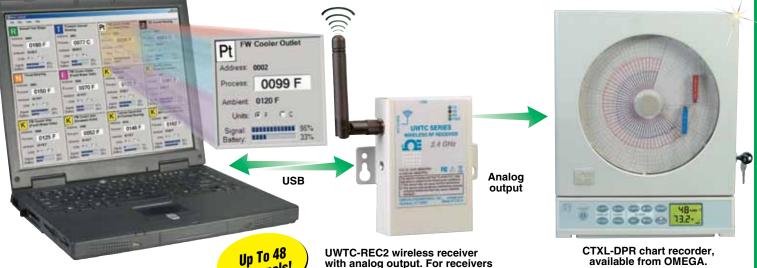


## **Typical Wireless System**

With OMEGA's wireless probes and receivers you can connect directly to a process recorder, as well as to your computer, to print and save your data!







## **Specifications** (Visit us online for complete specifications)

Input Type:  $100 \Omega$  Pt RTD: 0.00385(Class A) or 0.00392 curve; 500  $\Omega$ , 1000  $\Omega$  elements also available by

special order

Measurement Range: 0.00385: -200 to 850°C (-328 to 1562°F) 0.00392: -100 to 457°C (-148 to 854°F)

Accuracy: ±0.5°C (1°F) Resolution: 1°C/1°F

shop OMEGA.

Operating Environment: -10 to 70°C

(14 to 158°F)

Channels!

Transmit Sample Rate: Programmable

with analog output. For receivers

from 2 sec to 2 min

Battery Life: 3 yr at 1 sample/min rate

@ 25°C (77°F)

**Probe Assembly Material:** 

304 SS or 316 SS

## **Transmitter Housing Material:**

White polypropylene head

**Note:** Because of transmission frequency regulations, these products may only be used in the United States, Canada and Europe.

available from OMEGA.

To Order	
Model No.	Description
UWRTD-NB9W-(†)-(††)-4	Wireless RTD probe/transmitter/head assembly (4" probe)
UWRTD-NB9W-(†)-(††)-6	Wireless RTD probe/transmitter/head assembly (6" probe)
UWRTD-NB9W-(†)-(††)-4-B 11/2-S-260-U21/2-316SS	Wireless RTD probe/transmitter/head assembly with thermowell
UWRTD-NB9W-(†)-(††)-6-C 11/2-S-260-U41/2-316SS	Wireless RTD probe/transmitter/head assembly with thermowell
UWTC-BATT-C	Replacement battery, 3.6V lithium battery assembly (one included)

Note: USB programming cable and FREE measurement and data logging software are both included with compatible UW Series wireless receivers and transceivers.

Comes complete with transmitter protection head, integral probe, 3.6V lithium battery assembly and operator's manual.

† Specify sensor type and probe sheath: "1PT304" for  $100~\Omega$ , 0.00385 curve with 304 SS sheath, "1PT316" for  $100~\Omega$ , 0.00385 curve with 316 SS sheath, "2PT304" for  $100~\Omega$ , 0.00392 curve with 304 SS sheath, or "2PT316" for  $100~\Omega$ , 0.00392 curve with 316 SS sheath, no

†† Specify sheath diameter: "116" for 1.59 mm ( $\frac{1}{6}$ "), "18" for 3.18 mm ( $\frac{1}{6}$ "), "316" for 4.78 mm ( $\frac{3}{6}$ "), or "14" for 6.35 mm ( $\frac{1}{4}$ "). Ordering Examples: UWRTD-NB9W-1PT316-14-4-B, wireless RTD probe assembly,  $100 \Omega$ , 0.00385 curve, 316 SS sheath, 6.35 mm ( $\frac{1}{4}$ ") sheath diameter, 102 mm ( $\frac{4}{9}$ ") long, with  $\frac{1}{2}$ -S-260-U2 $\frac{1}{2}$ -316SS sanitary thermowell with  $\frac{2}{2}$ " insertion length.

**UWRTD-NB9W-1PT316-18-6**, wireless RTD probe assembly,  $100 \Omega$ , 0.00385 curve, 316 SS sheath, 3.18 mm ( $\frac{1}{8}$ ") sheath diameter, 152 mm (6") long.