



# Wireless pH/Temperature Transmitter

## with Automatic Temperature Compensation

UWPH-2-NEMA

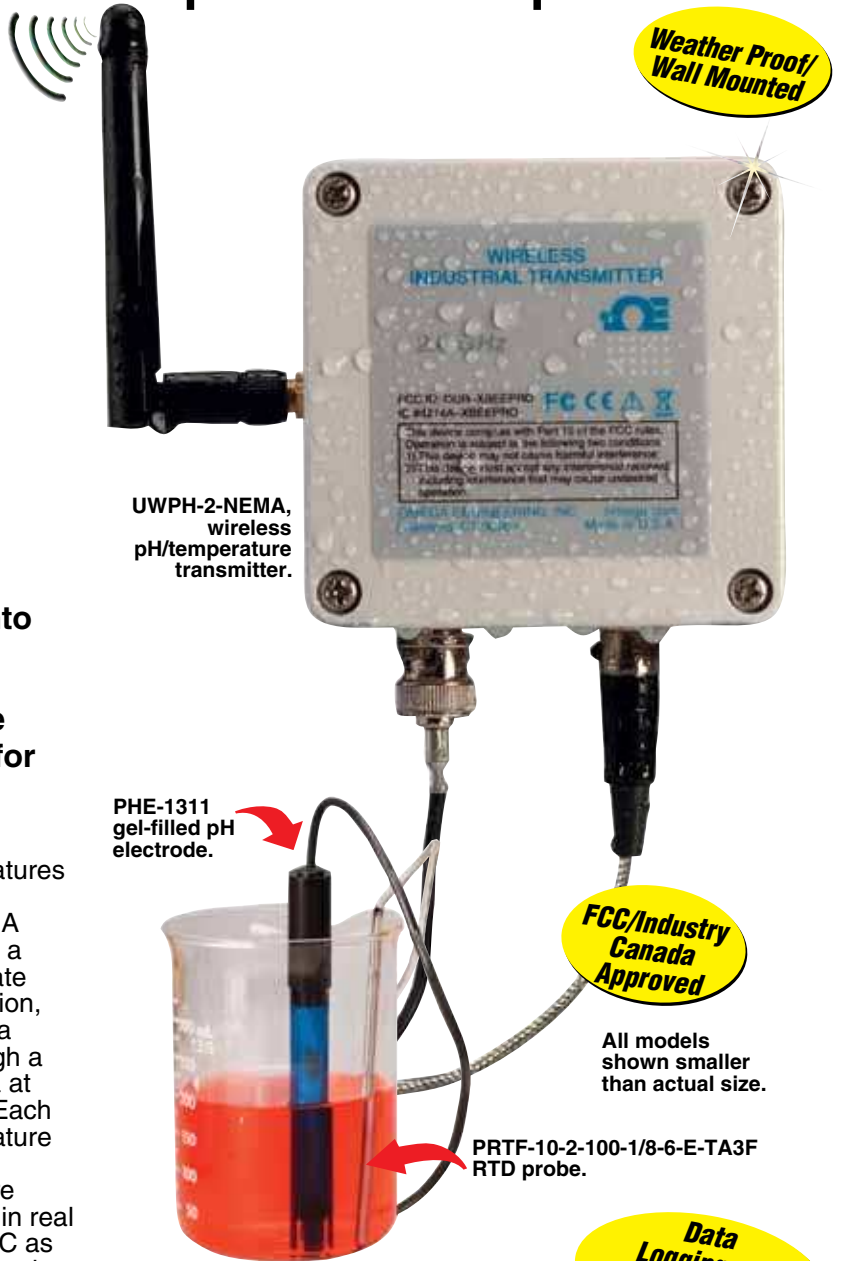


- ✓ 0 to 14 pH and 0 to 100°C (32 to 212°F) Ranges
- ✓ Transmit Data in Real-Time, Up to 120 m (400')
- ✓ Free Software Converts Your PC into a Multi-Channel Chart Recorder or Data Logger
- ✓ Low Power Operation and Sleep Mode
- ✓ Works with UWTC-REC Receivers for a Complete Wireless System

The new wireless pH/temperature transmitter features a high performance microprocessor based wireless radio transmitter built into a NEMA enclosure. Compatible with most pH probes with a BNC connector, the UWPH provides fast, accurate readings. For automatic temperature compensation, the UWPH accepts a Pt100 RTD probe through a standard (series T) connector. Configured through a standard USB port, the UWPH can transmit data at rates from every 2 seconds to every 2 minutes. Each transmitted reading includes the pH and temperature data, along with RF signal strength and battery condition to the host. Using the standard software (included), this data can be displayed on screen in real time. The software allows the user to use your PC as a meter, chart recorder or data logger, so data can be saved, or exported to a spreadsheet file.

### Works with Wireless Receivers:

- UWTC-REC1 48-Channel Receiver
- UWTC-REC2 48-Channel Receiver with Analog Output and Alarm
- UWTC-REC4 DIN Rail Mount 4-Channel Receiver with 4-Channel Analog Output and Alarms
- UWTC-REC6 1-Channel Receiver with Analog Output



UWPH-2-NEMA, wireless pH/temperature transmitter.

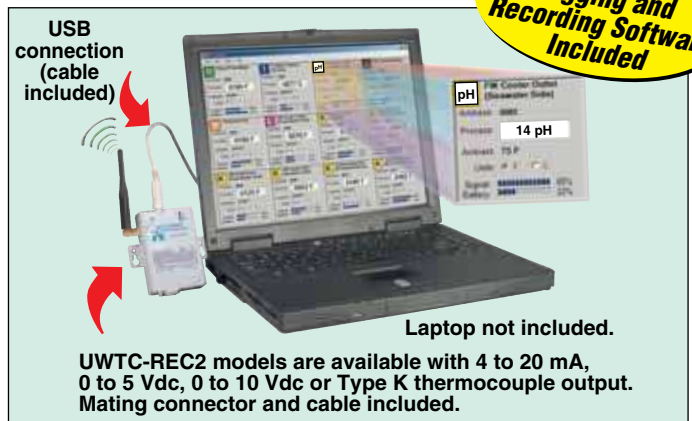
PHE-1311 gel-filled pH electrode.

FCC/Industry Canada Approved

All models shown smaller than actual size.

PRTF-10-2-100-1/8-6-E-TA3F RTD probe.

Data Logging and Recording Software Included



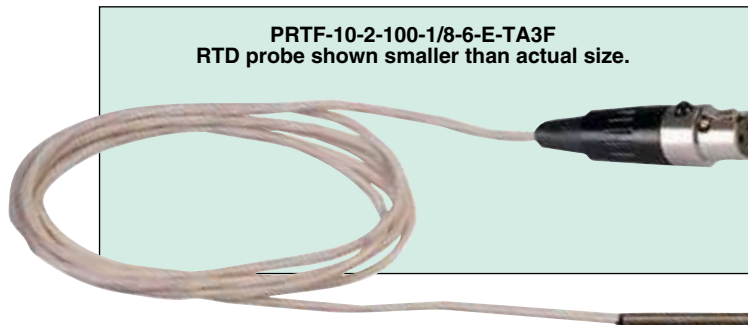
USB connection (cable included)

Laptop not included.

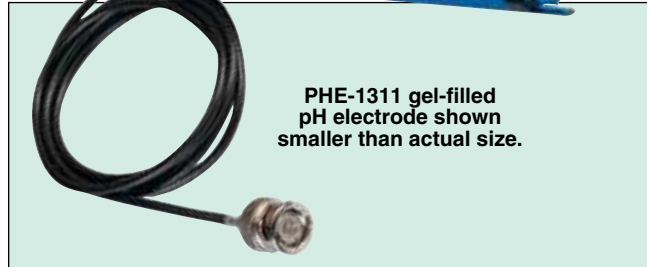
UWTC-REC2 models are available with 4 to 20 mA, 0 to 5 Vdc, 0 to 10 Vdc or Type K thermocouple output. Mating connector and cable included.



## Recommended RTD and pH Electrode



PRTF-10-2-100-1/8-6-E-TA3F  
RTD probe shown smaller than actual size.



PHE-1311 gel-filled  
pH electrode shown  
smaller than actual size.

### SPECIFICATIONS

**Input Range:** 0 to 14 pH

**Accuracy:** ±0.1 pH

**Resolution:** 0.01 pH

**Response Time:** 2 second max

**Input Connection:** BNC

**Temperature Compensation:**

Automatic, 0 to 100°C (32 to 212°F)

**RTD Temperature Input:**

**Input Type:** Pt100 Ω, 0.00385 curve

**Range:** 0 to 100°C (32 to 212°F)

**Accuracy:** ±1°C (1.8°F)

**Resolution:** 0.1°

**Input Connection:** TA3M receptacle;  
TA3F mating connector (included)

**Computer Interface:** USB

**Transmit Sample Rate:** Programmable  
from 2 seconds to 2 minutes

**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

**Software (Included Free):** Requires  
Windows® 2000, XP or Vista (32-bit)  
operating system

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

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

**Enclosure:** NEMA 4X polycarbonate

**Enclosure Dimensions:**

80 L x 82 mm W (3.15 x 3.23")

*Note: pH and RTD probes sold separately.*

**To Order Visit [newportUS.com/uwph-2-nema](http://newportUS.com/uwph-2-nema) for Pricing and Details**

| Model No.   | Description                         |
|-------------|-------------------------------------|
| UWPH-2-NEMA | Wireless pH/temperature transmitter |

### Receivers/Accessories

| 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-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   |
| UWTC-BATT-C                | Replacement 3.6V, lithium "C" cell battery assembly                               |
| PHE-1311                   | Gel-filled pH electrode, general purpose  |
| PRTF-10-2-100-1/8-6-E-TA3F | Pt100 RTD probe, 1/8" dia, 6" L, with 40' PFA insulated cable with TA3F connector |
| PHA-4                      | 4.00 pH buffer solution 500 mL (1 pint) bottle                                    |
| PHA-7                      | 7.00 pH buffer solution 500 mL (1 pint) bottle                                    |
| PHA-10                     | 10.00 pH buffer solution 500 mL (1 pint) bottle                                   |

*Comes complete with measurement/data logging software, one 3.6V lithium "C" cell assembly, TA3F RTD mating connector, and operator's manual. UWTC-REC2 units also include DC power adaptor.*

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

**Ordering Example:** UWPH-2-NEMA, wireless pH/temperature transmitter, UWTC-REC1, USB powered 48-channel transmitter receiver, PHE-1311, gel-filled pH electrode and PRTF-10-2-100-1/8-6-E-TA3F, Pt100 RTD probe.