



# Non-Contact Infrared Temperature Sensor With Wireless Transmitter

For Available Receivers, See Pages W-19 to W-26

UWIR-2-NEMA

**\$285**



- ✓ **-18 to 538°C (0 to 1000°F) Measurement Range**
- ✓ **Adjustable Emissivity from 0.10 to 1.0**
- ✓ **Free Software Converts Your PC Into a Multi- Channel Chart Recorder or Data Logger**
- ✓ **Low Power Operation and Sleep Mode For Long Battery Life**
- ✓ **Weather Resistant NEMA 4X (IP65) Enclosure**

The new infrared sensor with wireless transmitter features a remote IR sensor and radio wireless transmitter in a NEMA enclosure. The miniature sensor head is ideal for measuring temperatures from -18 to 538°C (0 to 1000°F) in confined, hard-to-reach places and harsh environments. The wireless transmitter is mounted in a NEMA-4 (IP65) plastic enclosure. When activated the unit will transmit readings continuously at pre-set time interval that was programmed by the user during the initial setup. Each unit measures and transmits: IR sensor reading, ambient temperature, RF signal strength and battery condition to the host and is displayed on the PC screen in real time using the provided software. Each compatible "UW" Series receiver or transceiver includes free software that converts your PC into a monitor, chart recorder, or data logger. Readings can be saved and later printed or exported to a spreadsheet file.

**Each Unit Transmits:**

- **Process and Ambient Temperatures**
- **Signal Strength**
- **Battery Status**

## Specifications

(See page W-27 for complete specifications)

**Temperature Range:** -18 to 538°C (0 to 1000°F)

**Accuracy @ 22°C (72°F) Ambient Temperature and Emissivity of 0.95 or Greater:** ±2% rdg or 2.2°C (4°F), whichever is greater

**Optical Field of View:** 6:1 (distance/spot size)

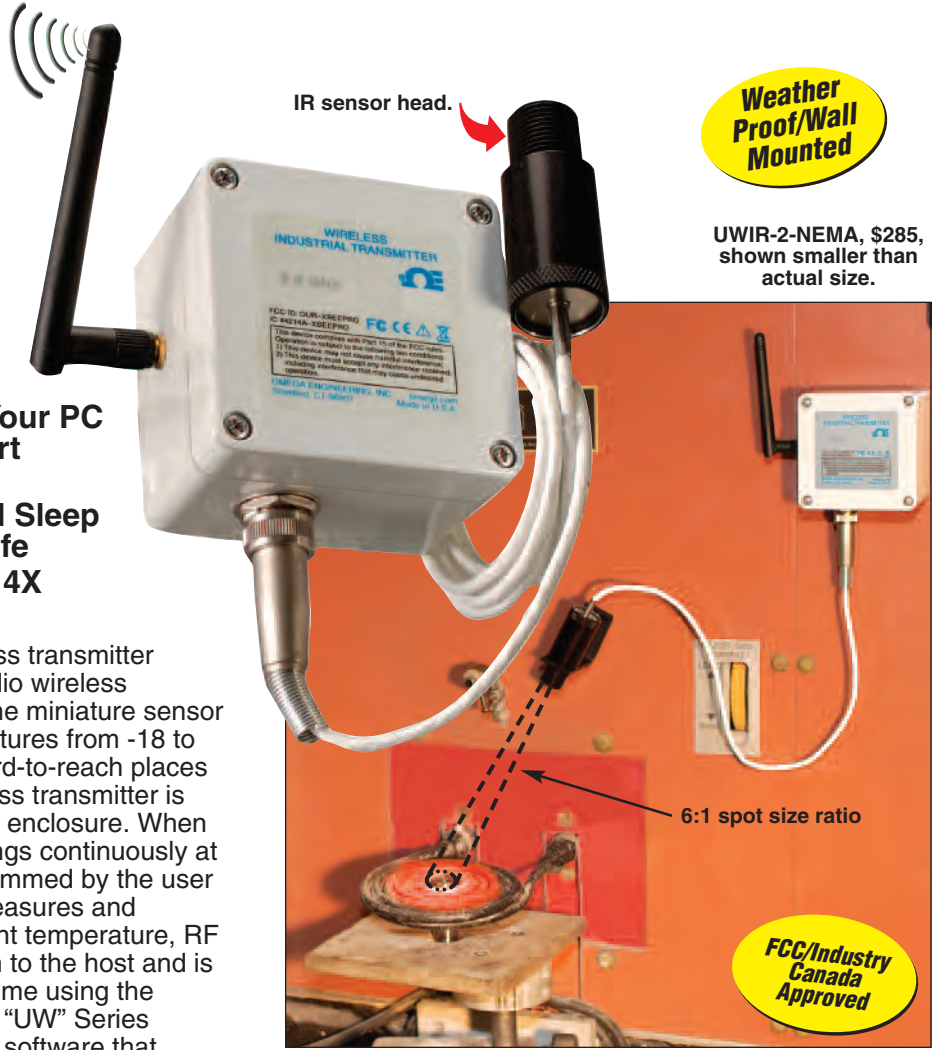
**Sensor Head Cable:** 1.8 m (6') standard; up to 15 m (50') total length capable

**Repeatability:** ±1% rdg

**Spectral Response:** 5 to 14 microns

**Response Time:** 100 ms (0 to 63% of final value)

**Emissivity Range:** 0.1 to 1.00, adjustable



**Weather Proof/Wall Mounted**

UWIR-2-NEMA, \$285, shown smaller than actual size.

Monitoring temperature of heating coil on an induction welder.

## Operating Temperature

**Wireless Transmitter:** -10 to 70°C (14 to 158°F)

**Sensor Head:** 0 to 70°C (32 to 158°F)

**Sensor Head with OS100-WC (Water Cooling Jacket):** 0 to 200°C (32 to 392°F)

**Operating Relative Humidity:** Less than 95% RH, non-condensing

**Water Flow Rate (OS100-WC):** 0.25 GPM, room temperature

**Thermal Shock:** About 30 minutes for 25°C (77°F) abrupt ambient temperature change

**Warm-Up Period:** 3 minutes

**Air Flow Rate (OS100-AP):** 1 CFM (0.5 L/s)

**Battery Life (Typ):** 1.5 @ 1 sample/minute reading rate @ 25°C (77°F)

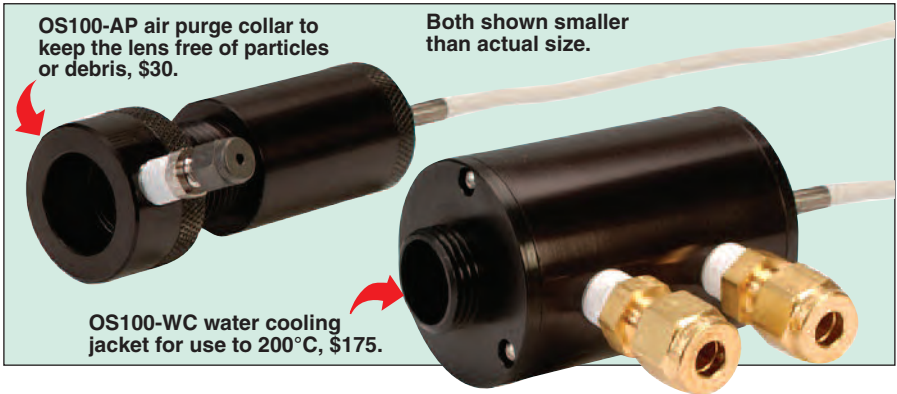
**Laser Sight Accessory (OS100-LS)**

**Wavelength (Color):** 630 to 670 nm (red)

**Operating Distance (Laser Dot):** Up to 9.1 m (30')

**Max Output Optical Power:** Less than 1 mW @ -6°C (22°F) ambient temperature

**European Classification:** Class 2, EN60825-1/11.2001



OS100-AP air purge collar to keep the lens free of particles or debris, \$30.

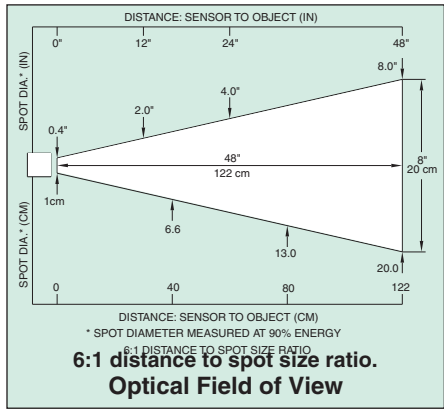
Both shown smaller than actual size.

OS100-WC water cooling jacket for use to 200°C, \$175.

**Max Operating Current:** 45 mA @ 3 Vdc  
**FDA Classification:** Complies with 21 CFR 1040.10, Class II laser product  
**Beam Diameter:** 5 mm (0.20")  
**Beam Divergence:** <2 mrad  
**Operating Temperature:** 0 to 50°C (32 to 122°F)  
**Operating Relative Humidity:** Less than 95% RH, non-condensing

**Power Switch:** On/off slide switch on the battery pack  
**Power Indicator:** Red LED  
**Power:** Battery pack, 3 Vdc (consists of two 1.5 Vdc "AA" lithium batteries)  
**Dimensions:** 38 Dia. x 50.8 mm L (1.5 x 2")

OS100-LS laser sight fits in front of the IR head for accurate positioning, \$175.



**Laser Sight Option**



Shown actual size.

**AVAILABLE FOR FAST DELIVERY!**

| <b>To Order (Specify Model Number)</b> |       |  |
|--|-------|--|
| Model No.                              | Price | Description  |
| UWIR-2-NEMA                            | \$285 | Non-contact wireless infrared transmitter with remote sensor, 1.8 m (6') cable |
| UWTC-BATT-C                            | 25    | Replacement 3.6V lithium "C" battery assembly (one included)                   |
| UWTC-CABLE                             | 5     | Spare programming cable (one included with receivers)                          |

**Accessories**

| Model No.    | Price | Description                              |
|--------------|-------|--|
| OS100-MB     | \$20  | Mounting bracket                         |
| OS100-DR     | 25    | DIN rail mounting adaptor                |
| OS100-AP     | 30    | Air purge collar                         |
| OS100-WC     | 175   | Water cool jacket, up to 200°C (392°F)   |
| OS100-LS     | 175   | Laser sighting accessory                 |
| OS100-CA15FT | 35    | Sensor head extension cable, 4.6 m (15') |
| OS100-CA25FT | 45    | Sensor head extension cable, 7.6 m (25') |

**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, infrared sensor head, sensor head mounting nut, 3.6V lithium battery assembly and operator's manual.

**Ordering Examples:** UWIR-2-NEMA, wireless infrared transmitter, UWTC-REC1, 48-channel USB receiver, UWTC-BATT-C, spare battery, and OS100-MB, sensor head bracket, \$285 + 225 + 25 + 20 = \$555.

UWIR-2-NEMA, wireless infrared transmitter, UWTC-REC2-D-MA, 48-channel transceiver/host with 1-channel 4 to 20 mA analog output, alarm and local display, UWTC-BATT-C, spare battery, and OS100-MB, sensor head bracket, \$285 + 265 + 25 + 20 = \$595.



OS100-MB, mounting bracket, \$20.

Shown smaller than actual size.