



Non-Contact Infrared Temperature Sensor With Wireless Transmitter

For Available Receivers, See omega.com

UWIR-2-NEMA



Weather Proof/Wall Mounted

UWIR-2-NEMA shown smaller than actual size.

- ✓ -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

OMEGA's 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 unit includes free software that converts your PC into a strip chart recorder or data logger so readings can be saved and later printed or exported to a spread sheet file.

Each Unit Transmits:

- Process and Ambient Temperatures
- Signal Strength
- Battery Status

Specifications

(See omega.com 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)

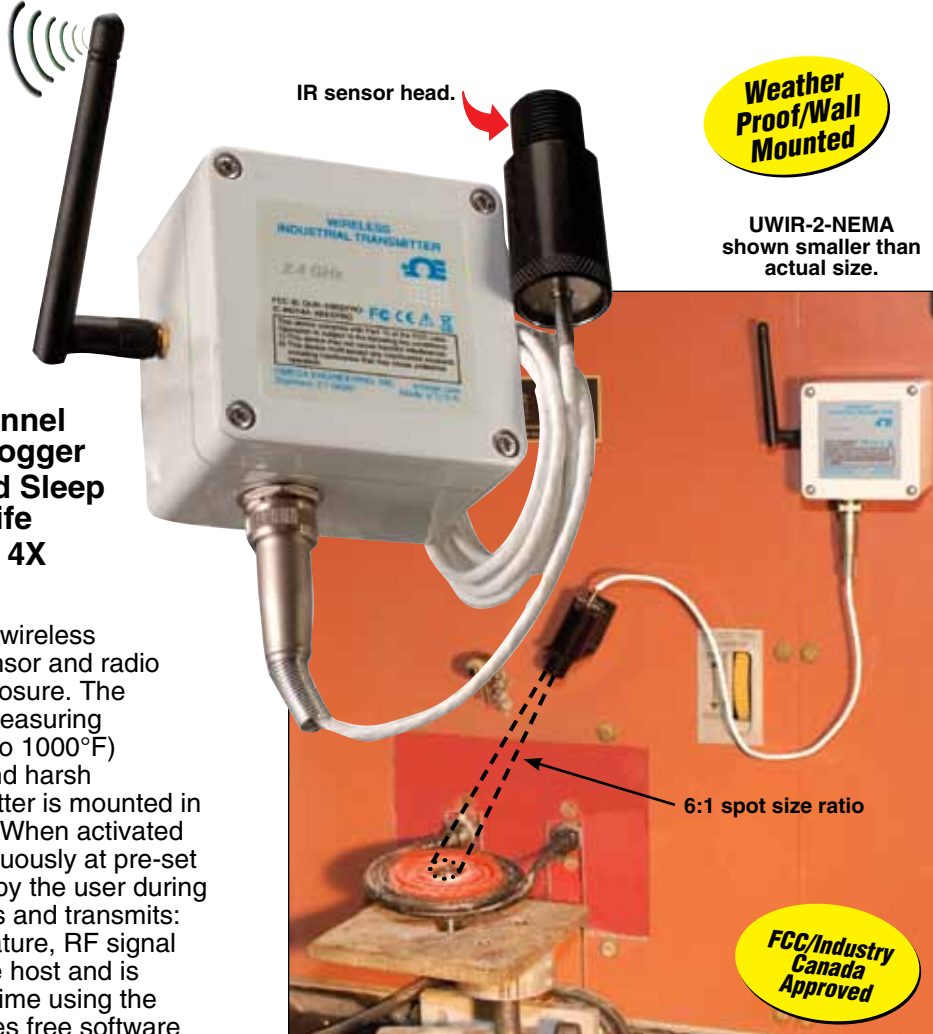
Sensor Head Cable: 1.8 m (6') standard; up to 15 m (50') total length capable

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



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)

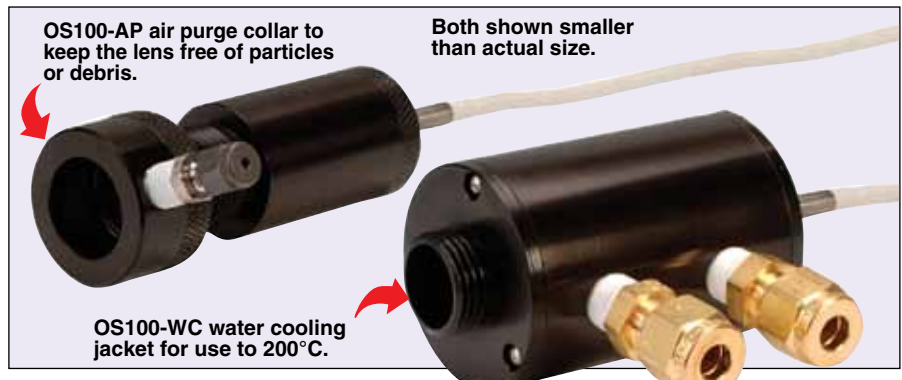
Laser Sight Accessory (OS100-LS)

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

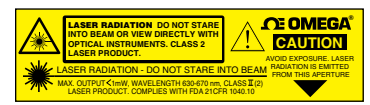
European Classification: Class 2, EN60825-1/11.2001



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

Both shown smaller than actual size.

OS100-WC water cooling jacket for use to 200°C.



Maximum 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 diameter x 50.8 mm L (1.5 x 2")

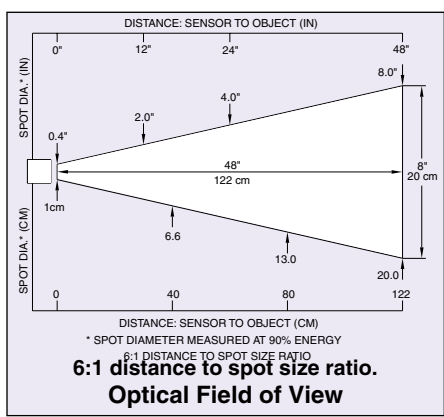


OMEGACARESM extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARESM covers parts, labor and equivalent loaners.



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

Shown actual size.



To Order Visit omega.com/uwir-2 for Pricing and Details

Model No.	Description
UWIR-2-NEMA	Non-contact wireless infrared transmitter with remote sensor, 1.8 m (6') cable
UWTC-BATT-C	Replacement 3.6V lithium "C" battery assembly
UWTC-CABLE	Spare programming cable (one included with receivers)

Accessories

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

Comes complete with operator's manual, software, mounting nut, and 3.6V lithium "C" battery assembly.

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.

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. OCW-3, OMEGACARESM extends standard 1-year warranty to a total of 4 years.



OS100-MB, mounting bracket.

Shown smaller than actual size.