



Non-Contact Infrared Temperature Sensor With Wireless Transmitter

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

UWIR-2-NEMA

\$285



Weather Proof/Wall Mounted

UWIR-2-NEMA, \$285, 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 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



Monitoring temperature of heating coil on an induction welder.

FCC/Industry Canada Approved

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)

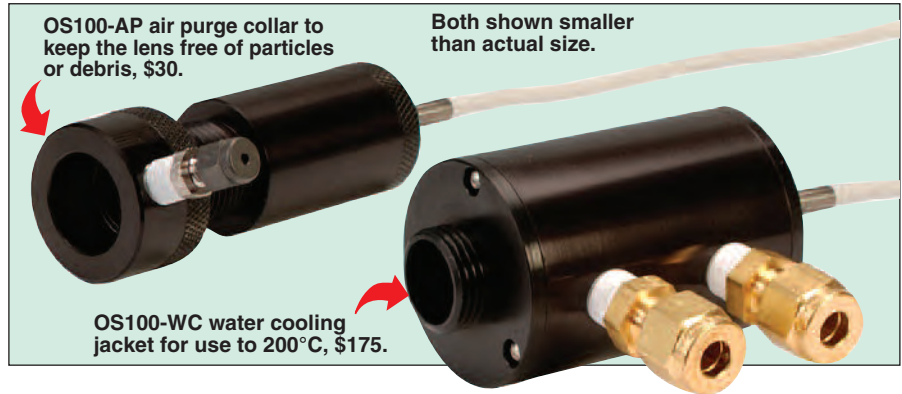
Laser Sight Accessory (OS100-LS)

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

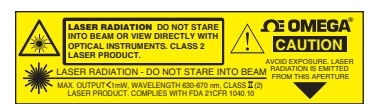
European Classification: Class 2, EN60825-1/11.2001



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

Both shown smaller than actual size.

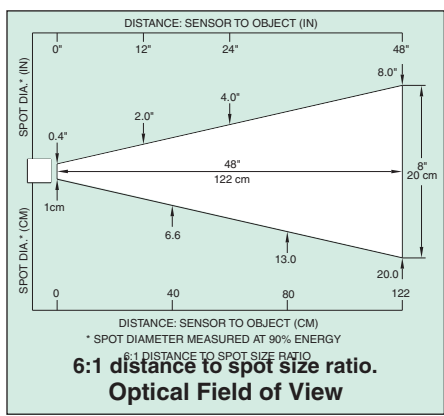
OS100-WC water cooling jacket for use to 200°C, \$175.



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!

To Order (Specify Model Number)		
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.



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• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

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• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters