



NON-CONTACT INFRARED TEMPERATURE SENSOR WITH WIRELESS TRANSMITTER

For Available Receivers, See Pages W-22 to W-32

UWIR-2-NEMA \$285



FCC/Industry Canada Approved



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

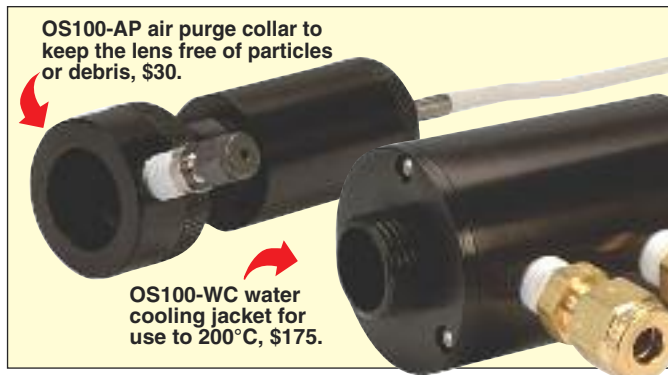
All models shown smaller than actual size.

- -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

Each Unit Transmits:

- Process Temperature
- Ambient Temperature
- Signal Strength
- Battery Status

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.



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

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

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 Extension: Up to 15 m (50') total
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
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 for 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)
Dimensions: 63.5 L x 25.4 mm D (2.5 x 1")

Wireless Transmitter

Computer Interface: USB

Transmit Sample Rate: Programmable from 1 per minute to 30 per min (1 per 2 sec)

Radio Frequency (RF) Transceiver

Carrier: ISM 2.4 GHz, direct sequence spread spectrum

RF Output Power: 10 dBm (10 mW)

Range of RF Link:

Up to 120 m (400') outdoor line of sight; Up to 40 m (130') indoor/urban

RF Data Packet Standard:

IEEE 802.15.4, open communication architecture

Software (Included Free):

Requires Windows® 2000, XP or Vista operating system

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

Battery Life (Typical): 1.5 years @ 1 sample/minute reading rate @ 25°C

Enclosure: NEMA-4X (IP65)
Polycarbonate

Dimensions:

Enclosure: 80 L x 82 W mm (3.1 x 3.2")

Sensor Head: 25.4 OD x 63.5 mm L (1 x 2.5")

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

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)

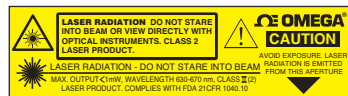
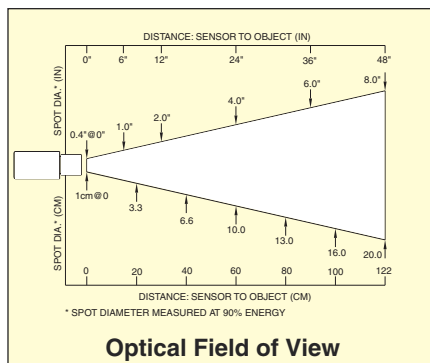
Operating Relative Humidity: Less than 95% RH, non-condensing

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")



WIRELESS W

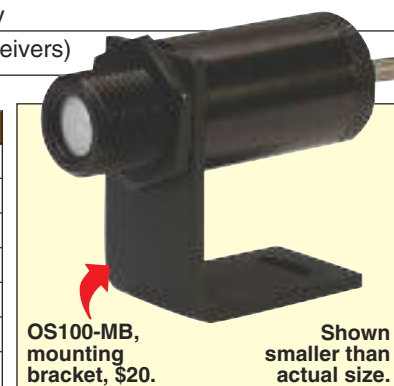
AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)

MODEL NO.	PRICE	DESCRIPTION
UWIR-2-NEMA	\$285	Non-contact wireless infrared transmitter with remote sensor head
UWTC-BATT-C	25	Replacement 3.6V lithium "C" battery assembly
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')



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, \$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.



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