

# Economical Infrared Temperature Sensor

## Features USB Interface and Free Charting and Logging Software

IR-USB



- ✓ Connects Directly to a USB Port on Your Computer
- ✓ Free TRH Central Software Converts Your PC into a Temperature Meter, Data Logger or Chart Recorder
- ✓ -18 to 538°C (0 to 1000°F) Measurement Range
- ✓ Adjustable Emissivity from 0.10 to 1.0

**Thermocouple Probe with USB Connection Available. See Model TJ-USB at omega.com**



Laptop not included.

The IR-USB infrared temperature sensor provides a reliable and economical method for most non-contact temperature monitoring applications. Each unit is factory calibrated to provide excellent sensitivity, fast response, and stability. The unit features a IR sensor/signal conditioner installation with a direct USB connection. The free user software converts your PC into a temperature meter, chart recorder or data logger. A mounting kit is also available that allows for wall or duct mounting.

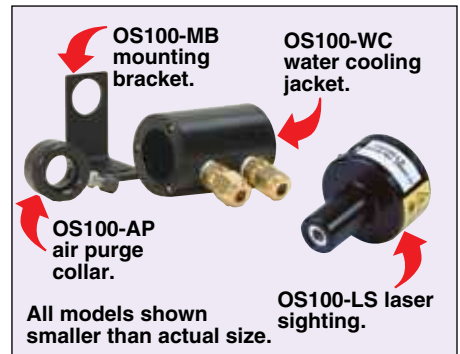
### Specifications

- PC Interface:** USB
- USB Cable:** Integral to sensor, 2 m (6') shielded Type A plug
- Software (Included):** Requires Windows® 2000, XP, Vista or Windows 7 operating system
- Temperature Range:** -18 to 538°C (0 to 1000°F)

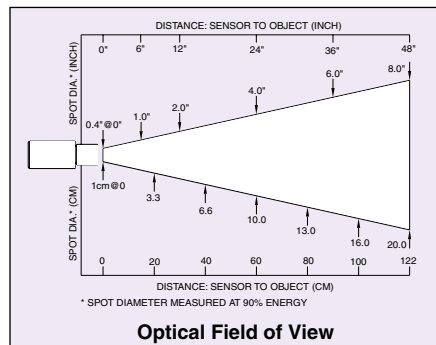
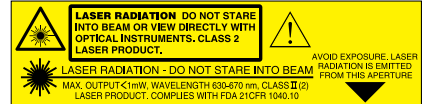
IR-USB

- 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)
- 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**
- Sensor Head:** 0 to 70°C (32 to 158°F)
- Sensor Head (-HT Model):** 0 to 85°C (32 to 185°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:** ~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) (1 x 2.5")
- Laser Sight Accessory (OS100-LS)**
- Wavelength (Color):** 630 to 670 nm (red)
- Maximum Laser Power Output:** <1 mW



All models shown smaller than actual size.



| To Order  |   |
|-----------|---|
| Model No. | Description                                     |
| IR-USB    | Infrared temperature sensor with USB connection |

| Accessories |   |
|-------------|---|
| Model No.   | Description                                   |
| CAL-3-IR    | NIST traceable calibration with 3 data points |
| OS100-MB    | Mounting bracket                              |
| OS100-AP    | Air purge collar                              |
| OS100-WC    | Water cool jacket, up to 200°C (392°F)        |
| OS100-LS    | Laser sighting accessory                      |

Comes complete with an integral shielded 2 m (6') USB cable with Type A connector, software, mounting nut and operator's manual.

Add "-HT" for high temperature sensor head for additional cost.

Ordering Example: IR-USB Infrared temperature sensor and OS100-MB mounting bracket.