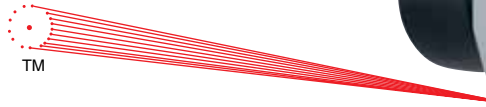


# High-Temperature Handheld High-Performance Infrared Thermometer

**PATENTED**  
Covered by U.S. and International patents and pending applications.

OMEGASCOPE®  
OS523E/OS524E  
Series



**Distance Measuring Option Available**

OMEGASCOPE® OS523E-2-SC unit with sighting scope, precisely aligned with infrared field of view, with 1.5:1 magnification.

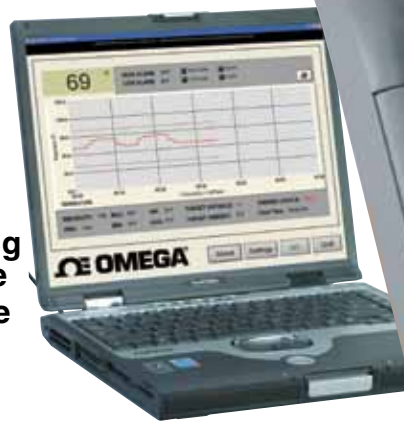
Shown smaller than actual size.



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

We make running changes when technical advances allow. Check at time of ordering for additional features.

- ✓ High Performance Rugged Design
- ✓ Available with Temperature Ranges to 2482°C (4500°F)
- ✓ Built-In Laser Sighting Dot/Circle Switchable
- ✓ Emissivity Adjustable from 0.1 to 1.00 in 0.01 Steps
- ✓ Distance-Measuring Option, Field-Mountable or Built-In [0.9 to 9 m (3 to 30') Range]
- ✓ Custom LCD (Current with Min, Max, Average, or Differential Temperatures)
- ✓ °C/°F Selectable
- ✓ 1 mV/Degree Analog Output Standard (0.5 mV/Degree on OS524E)
- ✓ RS232 Output with Free Data Logging Software
- ✓ Ambient Target Temperature Compensation
- ✓ Audible and Visible Alarms
- ✓ Integral Tripod Mount
- ✓ Electronic Trigger Lock
- ✓ Last Temperature Recall
- ✓ Data Storage for Up to 800 Temperature Points
- ✓ Distance-Measuring Option Available



Free Windows data logging PC application software (laptop not included).

With their powerful features, the portable and rugged high-temperature OS523E/524E Series infrared thermometers offer solutions for many non-contact temperature measurement applications. Their emissivity, adjustable in 0.01 increments, allows them to measure a variety of surfaces. A custom backlit LCD features dual digital display of the current and max, min, difference, or average temperatures simultaneously. Standard features include high and low audible and visual alarms, 1 mV/degree analog output, RS232 output, and temperature data storage.

## Specifications

**Accuracy:** ±1% rdg or 2°C (3.6°F), whichever is greater  
**Repeatability:** ±(1% rdg + 1 digit)  
**Resolution:** 1°C or 1°F  
**Response Time:** 100 ms  
**Spectral Response:**  
 OS523E: 8 to 14 microns  
 OS524E: 2 to 2.5 microns

## Dimensions:

### Without Sighting Scope:

218 H x 168 D x 51 mm W (8.6 x 6.6 x 2")

### With Sighting Scope:

218 H x 218 D x 51 mm W (8.6 x 8.6 x 2")

**Emissivity:** 0.10 to 1.00 in 0.01 increments

**Operating Temperature:** 0 to 50°C (32 to 122°F)

**Power:** 4 "AA" lithium batteries (2 sets included) or optional AC adaptor  
**Battery Life:** 14 days, lithium; 80 hours, alkaline

**Tripod Mount:** ¼ to 20 UNC

**Display:** Backlit LCD; displays current and min or max, differential, average temperatures simultaneously

**Alarm:** High and low alarm standard, with audible and visual indication

**RS232:** 2-way communications

# MONOGRAM SERIES

## Laser Sight Specifications

Wavelength (Color): 650 nm (red)

Operating Distance:

Laser Circle: 0.6 to 4.5 m (2 to 15')

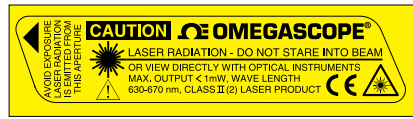
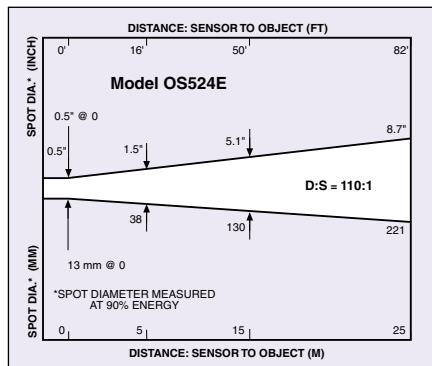
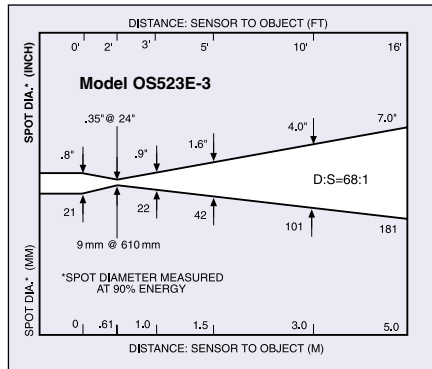
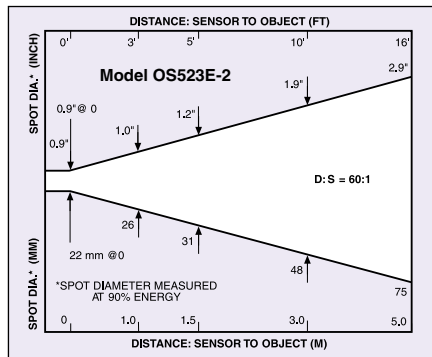
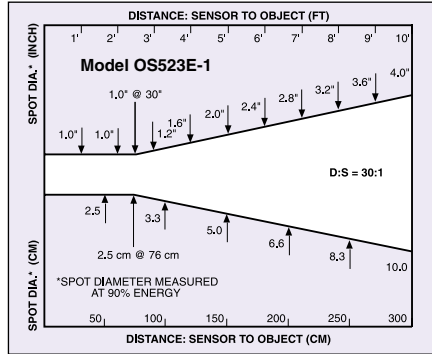
Laser Dot: 0.6 to 12 m (2 to 40')

FDA Classification: Class II

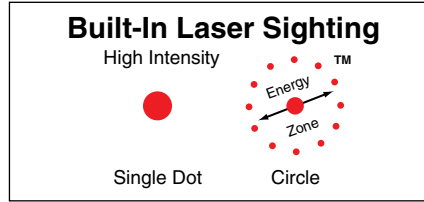
European Classification: Class 2

Beam Diameter: 5 mm (0.2")

Operating Temperature: 0 to 50°C  
(32 to 122°F)



**CAUTION!** – This product is not intended for medical use or use on humans



**Laser Circle to Dot Switchable**

Covered by U.S. and International patents and pending applications.



## To Order Visit [omega.com/os523e\\_os524e](http://omega.com/os523e_os524e) for Pricing and Details

Model No.	OS523E-1, -2, -3(*)	OS524E(*)
Accuracy†	±1% rdg	±1% rdg
Range	-18 to 1370°C (0 to 2500°F)	538 to 2482°C (1000 to 4500°F)
Emissivity	Adjustable	Adjustable
Backlit Dual Display	Standard	Standard
Distance to Spot Size Ratio	See Figure	110:1
Differential Temperature	Standard	Standard
Min/Max Temperature	Standard	Standard
Average Temperature	Standard	Standard
High Alarm	Standard	Standard
Low Alarm	Standard	Standard
Audible Buzzer and Indicator	Standard	Standard
Ambient Target Temp Comp.	Standard	Standard
Analog Output	1 mV/deg	0.5 mV/deg
RS232 Output	Standard	Standard
Free Data Logging Software	Standard	Standard
Distance	Optional	Optional
Data Logging	Standard	Standard
Data Storage	Standard	Standard
Laser Sight (Built-In)	Standard dot/circle (-3, dot)	Standard dot/circle
Trigger Lock	Standard	Standard
Last Temperature Recall	Standard	Standard

All units come complete with mini-tripod, 4 "AA" size lithium batteries, software CD, analog cable, RS232 cable, soft carrying case and operator's manual.

\* Add "-SC" for thermometer with sighting scope for additional cost, includes large hard carrying case OS520-SC-RCC. Add "-DM" for built-in distance measurement for additional cost.

† Or 2°C (0°F), whichever is greater.

**Sighting scope is factory installed and aligned, not field installable.**

**Ordering Examples:** OS523E-2-SC, OMEGASCOPE® infrared thermometer with batteries, factory-installed sighting scope, and large, hard carrying case.

OCW-3, OMEGACARE<sup>SM</sup> extends standard 2-year warranty to a total of 5 years.

## Accessories

Model No.	Description
UNIV-AC-100/240	Universal 9V adaptor
HH-DM	Distance meter (3' to 30')
OS520-RCC	Hard carrying case (standard)
OS520-SC-RCC	Hard carrying case (large)
OM-3000-SC	Soft carrying case (spare)
CAL-3-IR	NIST-traceable calibration
SC-520	Sighting scope
MINI-TRIPOD	Replacement mini-tripod expands from 142 to 279 mm (5.6 to 11")
WRS232-USB	Wireless RS232 transmitter/receiver
OM-CONV-USB	RS232 to USB cable