

Industrial Non-Contact Infrared Thermometer/Transmitter with Local Display and Analog Output



- ✓ Accuracy $\pm 1\%$ of Reading
- ✓ Models with Temperature Ranges Measuring Up to 1370°C (2500°F)
- ✓ Current, Voltage, or Millivolt Output
- ✓ Laser Sight Optional
- ✓ °C/°F Keypad Selectable
- ✓ Local Backlit LCD Display Standard
- ✓ Dual Display Indicates Current plus Min, Max, Average, or Differential Temperatures on Most Models
- ✓ Visual and Audible High Alarm Low Alarm (OS552, OS553, OS554)
- ✓ Emissivity Adjustable from 0.1 to 1.00 in 0.01 Steps via the Programmable Keypad
- ✓ Fast 250 msec Response Time
- ✓ Complete NEMA 4 (IP66) System
- ✓ RS232 Communication Available

OMEGA's OS550 Series industrial, high-performance, economical thermometer/transmitter offers a wide choice of temperature ranges, optical patterns, or fields of view and 3 outputs (1 mV/degree, 4 to 20 mA, and 0 to 5 Vdc) to feed directly into panel meters, recorders, temperature/process controllers, data loggers, data acquisition systems, or other process instrumentation.

Since the OS550 Series infrared thermometers do not use chopper motors or vibrator mechanisms, they can be mounted in any position and in hostile environments without suffering any loss in performance.

This rugged design coupled with relatively small dimensions makes these sensors ideally suited for a wide variety of applications.

OS550 Series Starts at **\$495**



FREE
data logging software included with models OS552, 553 and 554.

OS550, \$495, shown smaller than actual size.

OS550 sensor head (included) shown With optional mounting bracket and mounting nut.

Available Accessories

OS550-MN mounting nut, \$15.

OS550-MF mounting frame, \$65.



OS550-AP air purge collar, \$65.



OS550-WC air/water cooling jacket, \$195.



OS550-MB mounting bracket, \$35.

Specifications

Accuracy: $\pm 1\%$ of reading @ 25°C ambient or 1.7°C (3°F), whichever is greater

Repeatability: $\pm 1\%$ rdg ± 1 digit

Spectral Response: 8 to 14 microns

Emissivity Range: 0.10 to 1.00

Field of View (FOV): See diagrams

Display: Backlit LCD

Transmitter Outputs: 1 mV/degree, 0 to 5 Vdc or 4 to 20 mA

Power: 7 to 24 Vdc @ 80 mA

Environmental Ratings: NEMA 4 (IP65) water-tight and dust-tight for sensing head and electronics enclosure

Ambient Operating Range:

Sensing head 0 to 50°C (32 to 122°F)

with OS550-WC; 0 to 85°C

(32 to 185°F)

Response Time: 250 msec; 0 to 63.2%

Alarms: Visual and audible

RS232: Standard on OS552, OS553 and OS554 models; one-way communication; PC compatible software included

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

Connection: 4.5 m (15'), head and power cable included

Dimensions:

Sensing Head: 10.9 x 4.1 cm

(4.30 x 1.63"), 1½ to 20 thread

Electronics: 13.3 x 9.1 cm

(5.25 x 3.62")

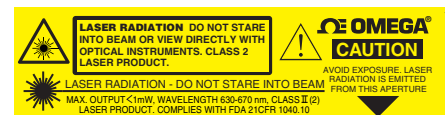
Weight:

Sensing Head: 0.45 kg (12 oz)

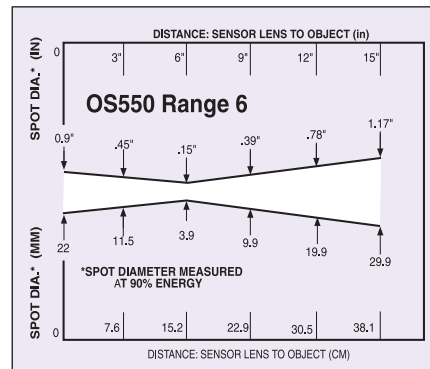
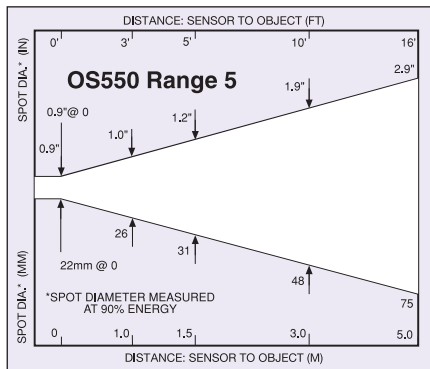
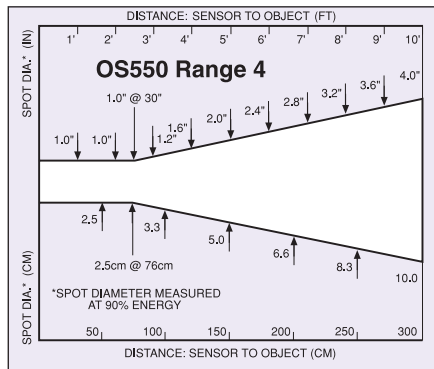
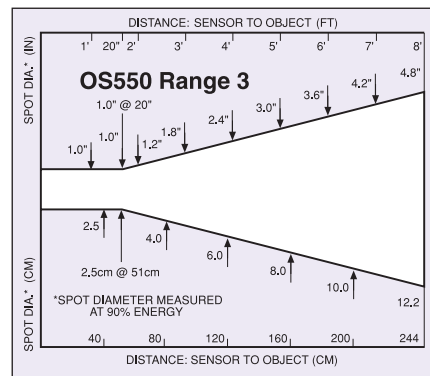
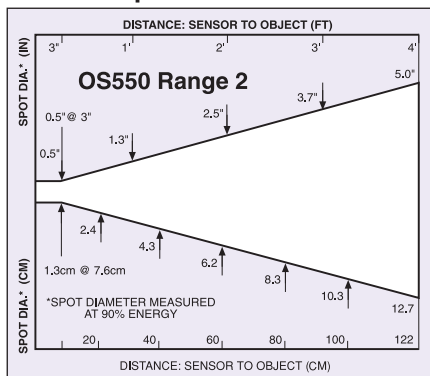
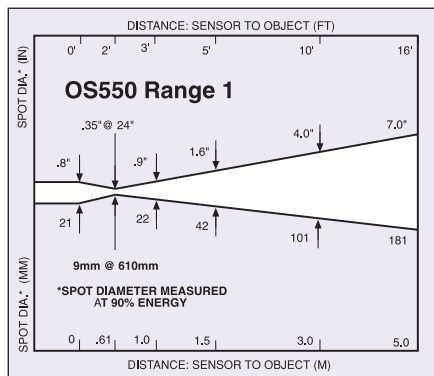
Electronics Mounted in NEMA 4

(IP65) Enclosure: 1.2 kg (43.2 oz)

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.



OS550 Series Optical Field of View Diagrams



MOST POPULAR MODELS HIGHLIGHTED!

To Order Complete NEMA 4 (IP65) System (Specify Model Number)					
Model No.	Price	Output	Temperature Range	RS232	Free PC Software
OS551-MV-(*)	\$495	1 mV/deg	-18 to 400°C (0 to 750°F)	—	—
OS551-MA-(*)	495	4 to 20 mA	-18 to 400°C (0 to 750°F)	—	—
OS551-V1-(*)	495	0 to 5 Vdc	-18 to 400°C (0 to 750°F)	—	—
OS552-MV-(*)	550	1 mV/deg	-18 to 540°C (0 to 1000°F)	Standard	Standard
OS552-MA-(*)	550	4 to 20 mA	-18 to 540°C (0 to 1000°F)	Standard	Standard
OS552-V1-(*)	550	0 to 5 Vdc	-18 to 540°C (0 to 1000°F)	Standard	Standard
OS553-MV-(*)	650	1 mV/deg	-18 to 870°C (0 to 1600°F)	Standard	Standard
OS553-MA-(*)	650	4 to 20 mA	-18 to 870°C (0 to 1600°F)	Standard	Standard
OS553-V1-(*)	650	0 to 5 Vdc	-18 to 870°C (0 to 1600°F)	Standard	Standard
OS554-MV-(*)	750	1 mV/deg	-18 to 1370°C (0 to 2500°F)	Standard	Standard
OS554-MA-(*)	750	4 to 20 mA	-18 to 1370°C (0 to 2500°F)	Standard	Standard
OS554-V1-(*)	750	0 to 5 Vdc	-18 to 1370°C (0 to 2500°F)	Standard	Standard

* Insert optics code from table below.

Note: Sensor head cable can be extended at the factory at time of purchase to a maximum of 15 m (50'). Add suffix "-(*)FT" to order number and \$1.00 per 0.3 m (1') over 5 m (15') to price.
Ordering Examples: OS552-MA-2, infrared thermometer with -18 to 540°C (0 to 1000°F) range, 4 to 20 mA output and spot size 12.7 mm (0.5") at 76 mm (3"), \$550. OS551-MA-2-35FT, OS551 with current output, 0.5 at 3" FOV, 11 meter sensor head cable, \$495 + 20 = \$515. OCW-3, OMEGACARESM extends standard 2-year warranty to a total of 5 years (\$128), \$515 + 128 = \$643.

Optical Table*

Optical Range Code	Field of View (FOV)
- 1	Spot size 8.9 @ 609 mm (0.35" @ 24")
- 2	Spot size 12.7 @ 76 mm (0.5" @ 3")
- 3	Spot size 25.4 @ 508 mm (1" @ 20")
- 4	Spot size 25.4 @ 762 mm (1" @ 30")
- 5	Spot size 25.4 @ 1524 mm (1" @ 60")
- 6	Spot size 3.8 @ 152 mm (0.15" @ 6")

Accessories

Model No.	Price	Description
OS550-AP	\$65	Air purge collar
OS550-WC	195	Air/water cooling jacket
OS550-MF	65	Mounting frame
OS550-MB	35	Right-angle mounting bracket
OS550-MN	15	Mounting nut
OS550-LS	195	Sighting viewer (laser) (not shown)*
CAL-3-IR	125	NIST calibration certification
CAL-3-IR-X	175	NIST calibration for over 1000°F
PSR-24S	60	Regulated power supply, US plug, 90 to 264 Vac input, 24 Vdc output, 400 mA, screw terminals, UL
PSR-24L	60	Regulated power supply, US plug, 90 to 264 Vac input, 24 Vdc output, 400 mA, stripped leads, UL
PSR-24L-230	60	Regulated power supply, European plug, 230 Vac input, 24 Vdc output, 400 mA, stripped leads, CE
TX4-100	28.50	Power/output extension wire 30 m (100')

* 1 unit suitable for aligning many heads.



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• Data Acquisition

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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