

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
 $^{\circ}\text{C}/^{\circ}\text{F}$ 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.



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

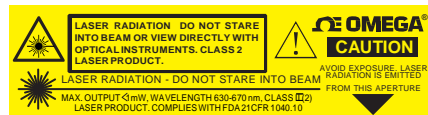
Dimensions:

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")

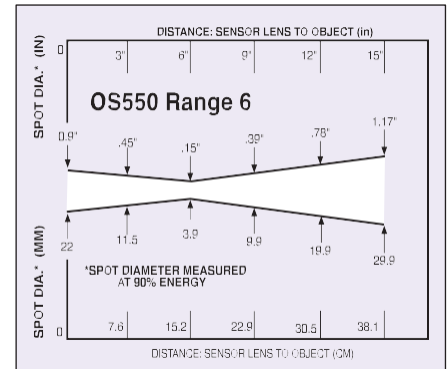
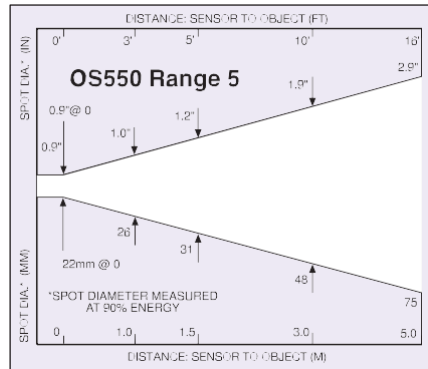
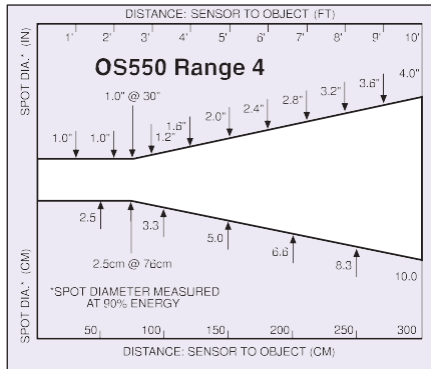
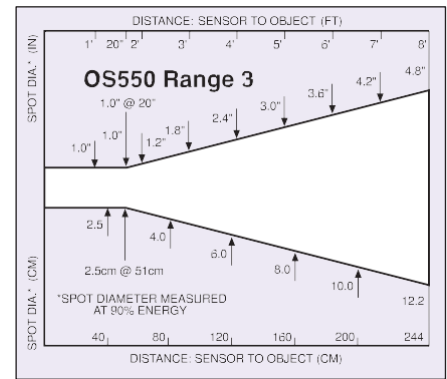
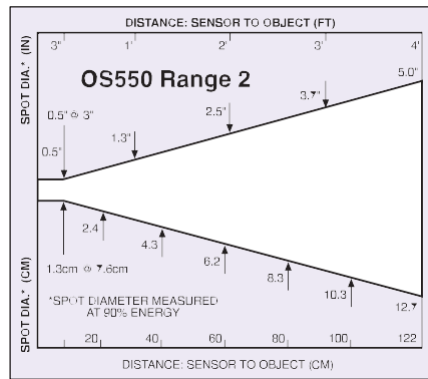
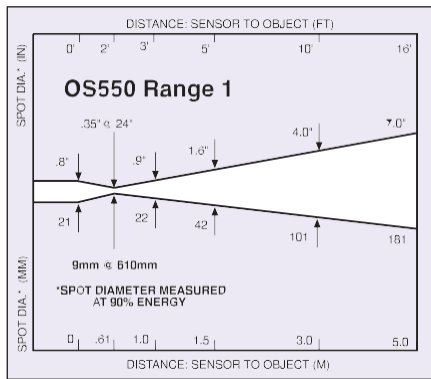
Weight:

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 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"). **OS551-MA-2-35FT**, OS551 with current output, 0.5 at 3" FOV, 11 meter sensor head cable. **OCW-3**, OMEGACARESM extends standard 2-year warranty to a total of 5 years,

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, 400mA, screw terminals, UL
PSR-24L	60	Regulated power supply, US plug, 90 to 264 Vac input, 24 Vdc output, 400mA, stripped leads, UL
PSR-24L-230	60	Regulated power supply, European plug, 230 Vac input, 24 Vdc output, 400mA, 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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• Heaters

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