

# Convir OS550 Series Non-Contact Temperature Sensor with Local Display and Analogue Output

- ◆ Accuracy  $\pm 1\%$  of Reading
- ◆ Models with Temperature Ranges Measuring up to 1370°C
- ◆ 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/Low Alarm
- ◆ Emissivity Adjustable from 0.1 to 1.00 in 0.01 steps via the Programmable Keypad
- ◆ Fast 250 ms response time
- ◆ RS-232 Communication available
- ◆ Safe and Easy to Install

The new Convir OS550 Series industrial, high performance, temperature sensor offers a wide choice of temperature ranges, optical patterns or fields of view and three outputs (1 mV/degree, 4 to 20 mA, and 0 to 5 V DC) to feed directly into panel meters, recorders, temperature/process controllers, dataloggers, data acquisition systems or other process instrumentation. They can be mounted in any position and in hostile environments without suffering any loss in performance. Their rugged design and relatively small dimensions make these sensors ideally suited for a wider variety of applications.

The OS550-BB is identical to the OS550 except that the electronics is not protected by a NEMA-4 enclosure.

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## GENERAL SPECIFICATIONS

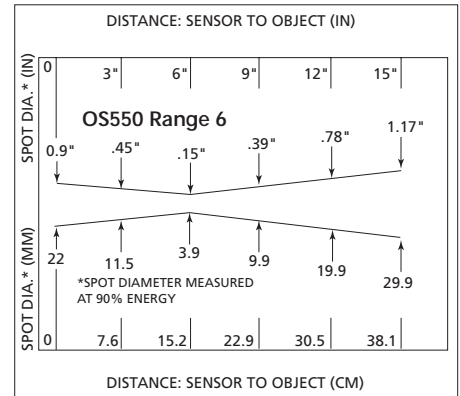
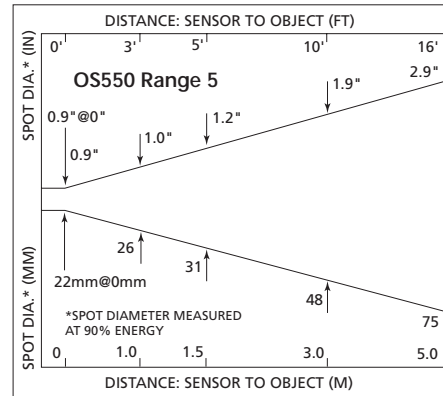
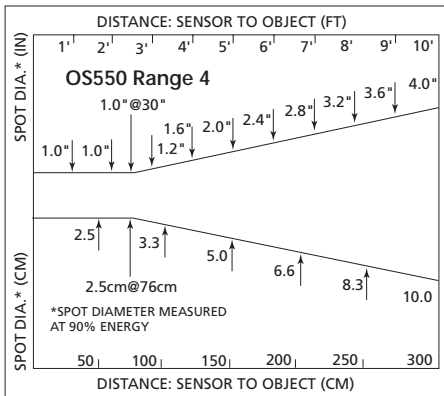
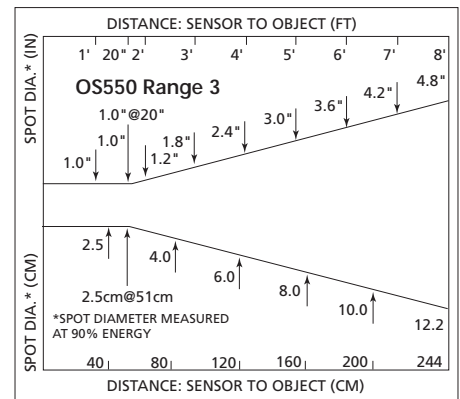
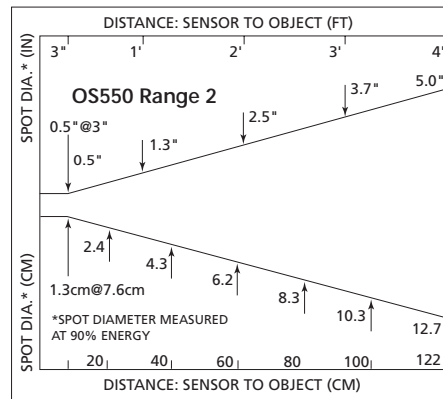
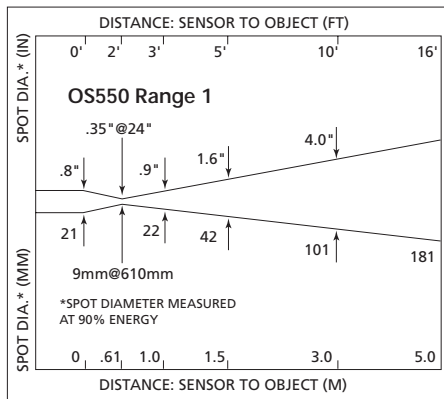
Accuracy	$\pm 1\%$ of reading or 2°C @ 25°C ambient, whichever is greater
Repeatability	$\pm 1\%$ rdg $\pm 1$ digit
Spectral Range	8 to 14 $\mu\text{m}$
Emissivity Range	0.10 to 0.99
Field of View (FOV)	See Diagrams
Display	Backlit LCD
Transmitter Outputs	1 mV/degree, 0 to 5 V DC, or 4 to 20 mA
Power	7 to 24 V DC @ 80 mA
Environmental Ratings	OS550: IP65 water tight and dust tight for sensing head and electronics enclosure OS550-BB: IP65 water tight and dust tight sensing head only
Ambient Operating Range	Sensing head: 0 to 85°C with OS550-WC, 0 to 50°C without OS550-WC Electronics: 0 to 50°C
Response Time	250 ms; 0 to 63.2%
Alarms	Visual and audible
RS-232	Standard on OS552, OS553, and OS554 models. One way communication. PC compatible software included.
Connection	4.5 m Head and Power Cable Included
Dimensions	Sensing Head: 10.9 x 4.1 cm, 1½ -20 thread Electronics: 13.3 x 9.1 cm (OS550), 11.8 x 91.1 cm (OS550-BB)
Weight	Sensing Head: 0.45 kg OS550 Electronics (mounted in IP65 enclosure) 1.2 kg OS550-BB Electronics (without enclosure): 1.13 kg

## ACCESSORIES

Model Number	Description
OS550-AP	Air purge collar
OS550-WC	Air/water cooling jacket
OS550-MF	Mounting frame
OS550-MB	Right-angle mounting bracket
OS550-MN	Mounting nut
OS550-LS	Sighting viewer (laser)*
CAL-80-IR	Calibration Certification
PSU-93-UK	DC power supply with UK plug
PSU-93-EU	DC power supply with Euro plug
TX4-100	Power/output extension wire (30 m)
Suffix (x)FT	Longer cable (x feet) up to 50 feet (15 m) max.

\*One unit suitable for aligning many heads.

## OS550 SERIES OPTICAL FIELD OF VIEW DIAGRAMS



### OPTICAL TABLE

Optical Range Code	Field of View (FOV)
- 1	Spot Size 9 mm @ 61 cm
- 2	Spot Size 1.3 cm @ 7.6 cm
- 3	Spot Size 2.5 cm @ 51 cm
- 4	Spot Size 2.5 cm @ 76 cm
- 5	Spot Size 2.5 cm @ 152 cm
- 6	Spot Size 3.9 mm @ 15.2 cm

### TO ORDER (SPECIFY MODEL NO.)

Model Number	Output	Temperature Range	RS-232
OS551-MV-*(-)-(**)	1 mV/deg.	-18 to +400°C	—
OS551-MA-*(-)-(**)	4 to 20 mA	-18 to +400°C	—
OS551-V1-*(-)-(**)	0 to 5 VDC	-18 to +400°C	—
OS552-MV-*(-)-(**)	1 mV/deg.	-18 to +540°C	Standard
OS552-MA-*(-)-(**)	4 to 20 mA	-18 to +540°C	Standard
OS552-V1-*(-)-(**)	0 to 5 VDC	-18 to +540°C	Standard
OS553-MV-*(-)-(**)	1 mV/deg.	-18 to +870°C	Standard
OS553-MA-*(-)-(**)	4 to 20 mA	-18 to +870°C	Standard
OS553-V1-*(-)-(**)	0 to 5 VDC	-18 to +870°C	Standard
OS554-MV-*(-)-(**)	1 mV/deg.	-18 to +1370°C	Standard
OS554-MA-*(-)-(**)	4 to 20 mA	-18 to +1370°C	Standard
OS554-V1-*(-)-(**)	0 to 5 VDC	-18 to +1370°C	Standard

\* Insert optics code from table. \*\* Insert BB for electronics without NEMA-4 enclosure

Ordering Example: OS552-MA-2, Infrared thermometer with -18 to 540°C range, 4 to 20 mA output and spot size .13 cm @ 7.6 cm

Note: Sensor head cable can be extended at the factory at time of purchase to a maximum of 50 feet (15m).