

Fast-Response Infrared Fiber Optic Thermometer/Transmitter

With Local Display and Analog Output

OS1592 Series
Starts at

\$2320



NEMA 4
electronics
housing.

Fiber optic cable, included.

OS1592, \$2320,
shown smaller than
actual size.

Style L1 remote
optical head shown.
Transmitter price includes
sensor head with 1.5 m (5')
fiber optic cable.

- ✓ Fast 25 msec Time Constant (0 to 63% of Final Value)
- ✓ Well-Suited for Both Hard-to-Reach and Polymer Bolt Applications
- ✓ Accuracy: 1% of Reading
- ✓ Models with Temperature Ranges Measuring up to 2482°C (4500°F)
- ✓ Isolated Analog Output, mV, °C or °F, and Either Current, Voltage, Millivolt, or Thermocouple Output
- ✓ °C/°F Keypad Selectable
- ✓ Local Backlit LCD Display Standard
- ✓ Visual Alarm and Built-In Relay
- ✓ Dual Display Indicates Current Plus Min, Max, or Differential Temperatures
- ✓ Emissivity Adjustable from 0.05 to 1.00 in 0.01 Steps Via the Keypad
- ✓ Complete NEMA 4 System
- ✓ Dual Analog Outputs Isolated from Power Supply Input

CE marked low cost OS1590 Series infrared fiber optic thermometer/transmitter system measures temperature ranges up to 2482°C (4500°F) and provides dual analog outputs (4 to 20 mA, 0 to 5 Vdc, 0 to 10 Vdc, 1 mV/Deg, J, K T/C) electrically isolated from the DC power supply input. The main electronics is in a NEMA 4 (IP66) rated aluminum housing with a local backlit LCD, built-in relay, alarm LED, and a 4-position programmable keypad.

Available Now!

IR2 SUPERMETER®
ULTRA HIGH PERFORMANCE
2-COLOR RATIO FIBER OPTIC
INFRARED TEMPERATURE
MEASUREMENT AND
CONTROL SYSTEM

- ✓ Temperature Range from 300 to 3000°C (572 to 5432°F)
- ✓ Ethernet and RS232/485 Options Available

\$2995
Complete!

PATENTED

Please see page J-89 for additional information.



Specifications

Temperature Range:

- R1: 260 to 538°C (500 to 1000°F)
- R2: 538 to 1093°C (1000 to 2000°F)
- R3: 1093 to 2482°C (2000 to 4500°F)

Accuracy: 1% of rdg

Repeatability: 0.75% of rdg

Response Time: 25 msec (0 to 63% of final value)

Emissivity: 0.05 to 1.00 adjustable, set via keypad

Spectral Response: 0.8 to 1.8 microns

Analog Output: 1 mV/deg, standard

Second Analog Output: 0 to 5 Vdc, 0 to 10 Vdc, 4 to 20 mA, or Type J or K thermocouple

Display: Backlit dual LCD

Keypad: 4 position, tactile feedback membrane switch

Calculated Temperature Values:

Maximum, minimum, differential

High Alarm: Set via keypad with built-in relay

Relay Contact Rating:

5 A @ 28 Vdc

Operating Ambient Temperature:

0 to 50°C (32 to 122°F)

Enclosure: Die-cast aluminum, NEMA 4 (IP66)

Dimensions

Main Housing:

5.6 H x 8.9 W x 11.4 cm L
(2.2 x 3.5 x 4.5")

Optical Assembly:

L1-Lens: 2.5 Dia. x 15.9 cm (1 x 6.25")

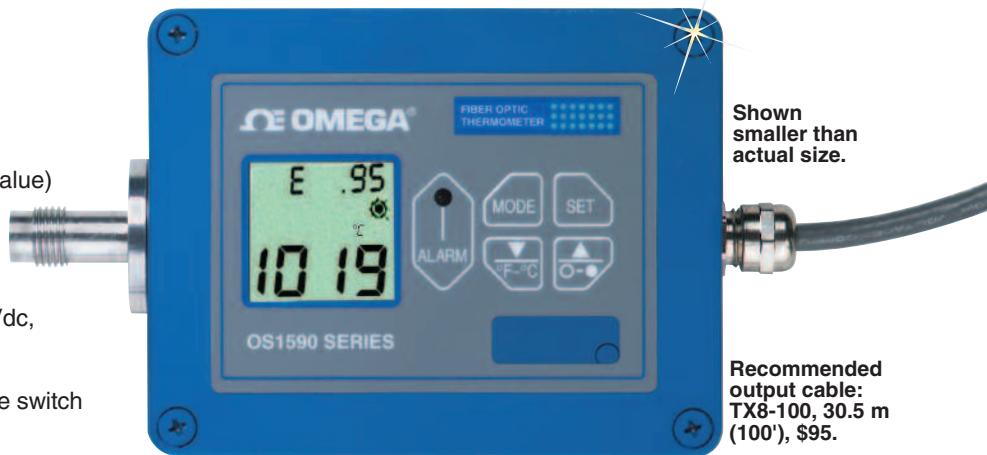
L2-Ceramic Tip: 0.47 Dia. x 15.2 cm (0.187 x 6")

L3-Polymer Bolt: 0.95 Dia. x 10 cm (0.375 x 4")

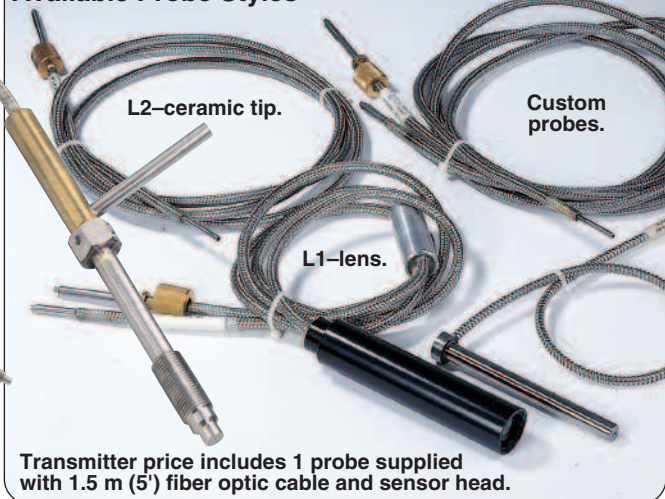
Power: 18 to 36 Vdc

Note: Contact factory if a replacement probe is needed. Probe is calibrated with your transmitter at time of purchase and is not field replaceable.

OS1590 Series backlit display and programmable key pad.



Available Probe Styles



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)				
Model No.	Price	Temperature Range	Optical Assembly, Spot Size	Cable Length
OS1592-L1-R1-1-(*)	\$2320	260 to 538°C (500 to 1000°F)	Lens probe, 6.35 mm @ 203.2 mm (0.25" @ 8")	1.5 m (5')
OS1592-L2-R1-(*)	2360	260 to 538°C (500 to 1000°F)	Ceramic tip, 152.4 mm (6") Probe	1.5 m (5')
OS1592-L3-R1-(*)	2965	260 to 538°C (500 to 1000°F)	Polymer bolt, 101.6 mm (4") Probe	1.5 m (5')
OS1592-L1-R2-1-(*)	2320	538 to 1093°C (1000 to 2000°F)	Lens probe, 6.35 mm @ 203.2 mm (0.25" @ 8")	1.5 m (5')
OS1592-L1-R2-2-(*)	2320	538 to 1093°C (1000 to 2000°F)	Lens probe, 4.83 mm @ 508 mm (0.19" @ 20")	1.5 m (5')
OS1592-L1-R2-3-(*)	2320	538 to 1093°C (1000 to 2000°F)	Lens probe, 1.93 mm @ 152.4 mm (0.076" @ 6")	1.5 m (5')
OS1592-L2-R2-(*)	2320	538 to 1093°C (1000 to 2000°F)	Ceramic tip, 152.4 mm (6") Probe	1.5 m (5')
OS1592-L3-R2-(*)	2965	538 to 1093°C (1000 to 2000°F)	Polymer bolt, 101.6 mm (4") Probe	1.5 m (5')
OS1592-L1-R3-2-(*)	2320	1093 to 2482°C (2000 to 4500°F)	Lens probe, 4.83 mm @ 508 mm (0.19" @ 20")	1.5 m (5')
OS1592-L1-R3-3-(*)	2320	1093 to 2482°C (2000 to 4500°F)	Lens probe, 1.93 mm @ 152.4 mm (0.076" @ 6")	1.5 m (5')

Accessories

Model No.	Price	Description
OS1500-BLS	\$495	Backlight source
OS1500-BLF	145	Backlight fiber assembly to use with OS1500-BLS
OS1500-RC	35	Replacement bulb for backlight source
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
PSU-93	40	Unregulated power supply, 16 to 23 Vdc, 300 mA max, screw terminal
TX8-100	95	8-conductor shielded cable, 30.5 m (100')

* **Specify second analog output:** J = Thermocouple output, Type J (for R1 temp range only); K = Thermocouple output, Type K (for R1 and R2 temp range only); mA = 4 to 20 mA output; V1 = 0 to 5 Vdc output; V2 = 0 to 10 Vdc output. **This unit provides two separate analog outputs.**

The first is 1 mV/deg.

Ordering Examples: OS1592-L1-R1-1-MA, OS1592 transmitter with lens probe, 260 to 538°C (500 to 1000°F) temperature range, 1 mV/deg and 4 to 20 mA output, \$2320.