Fast Response Infrared Fibre Optic Thermometer/Transmitter
With Local Display and Analogue Output

Model OS1592
£1900
Basic Unit

Fibre Optic Cable

Shown smaller than actual size

Remote Optical Head

IP65 Electronics Housing

- ✔ **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 Analogue 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**

- ✔ **25 msec (0 to 63% of Final Value)**
- ✔ **Complete IP65 System**
- ✔ **Safe and Easy to Install**
- ✔ **Dual Analogue Outputs Isolated from Power Supply Input**

OMEGA's new, low cost OS1590 Series infrared fibre optic thermometer/transmitter system measures temperature ranges up to 2482°C and provides dual analogue outputs (4-20 mA, 0-5 Vdc, 0-10 Vdc, 1 mV/Deg, J, K T/C) electrically isolated from the DC power supply input. The main Electronics is in an IP65 rated Aluminium housing with a local backlit LCD, built-in Relay, alarm LED, and a 4-position programmable keypad.

NEW

Two Colour Fibre Optic Thermometer/Transmitter

See page H-39 for details.

IR Thermometer/Transmitter

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
Analogue Output: 1 mV/deg, standard
Second Analogue Output:
0 to 5 Vdc, 0 to 10 Vdc,
4-20 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: 5A@28Vdc
Operating Ambient Temperature:
0 to 50°C (32 to 122°F)
Enclosure: Die cast aluminium, IP65
Dimensions:
Main Housing: 8.9 W x 5.6 H x 11.4 L cm
(3.5 x 2.2 x 4.5")
Optical Assembly:
L1- Lens: 2.5 Dia. x 15.9 cm (1 x 6.25")
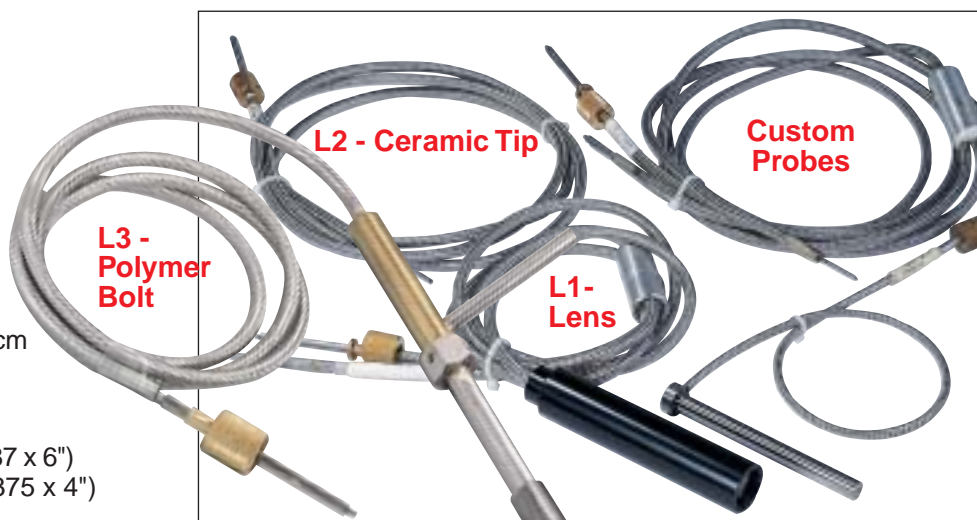L2- Ceramic Tip: 0.47 Dia. x 15.2 cm (0.187 x 6")
L3- Polymer Bolt: 0.95 Dia. x 10 cm (0.375 x 4")
Power: 18 to 36 Vdc

OS1590 Series backlit display and programmable key pad

Shown slightly smaller than actual size

L2 - Ceramic Tip

Custom Probes

L3 - Polymer Bolt

L1- Lens

To Order *(Specify Model No.)*

Model Number	Price	Temperature Range	Opt. Assy. (Spot Size)	Cable Length†
OS1592-L1-R1-1-*	**£1900**	260 to 538°C (500 to 1000˚F)	Lens Probe (6mm @ 200mm)	1.5 m
OS1592-L2-R1-*	1935	260 to 538°C (500 to 1000˚F)	Ceramic Tip, 150mm Probe	1.5 m
OS1592-L3-R1-*	2430	260 to 538°C (500 to 1000˚F)	Polymer Bolt, 100mm Probe	1.5 m
OS1592-L1-R2-1-*	1900	538 to 1093°C (1000 to 2000˚F)	Lens Probe (6mm @ 200mm)	1.5 m
OS1592-L1-R2-2-*	1900	538 to 1093°C (1000 to 2000˚F)	Lens Probe (4.8mm @ 500mm)	1.5 m
OS1592-L1-R2-3-*	1900	538 to 1093°C (1000 to 2000˚F)	Lens Probe (1.9mm @ 150mm)	1.5 m
OS1592-L2-R2-*	1935	538 to 1093°C (1000 to 2000˚F)	Ceramic Tip, 150mm Probe	1.5 m
OS1592-L3-R2-*	2430	538 to 1093°C (1000 to 2000˚F)	Polymer Bolt, 100mm Probe	1.5 m
OS1592-L1-R3-2-*	1900	1093 to 2482°C (2000 to 4500˚F)	Lens Probe (4.8mm @ 500mm)	1.5 m
OS1592-L1-R3-3-*	1900	1093 to 2482°C (2000 to 4500˚F)	Lens Probe (1.9mm @ 150mm)	1.5 m

Accessories	Price	Description
OS1500-BLS	**£406**	Backlight Source
OS1500-BLF	119	Backlight Fibre Assembly to use with OS1500-BLS
OS1500-RC	28.50	Replacement Bulb
OS1592-MB	24.50	Mounting Bracket
OS1592-API	336	Air Purge Collar
DRN-PS-1000	123	Din Rail Mount Power Supply. 90-240 Vac Input. 24V 1A dc Output

The unit provides two separate analogue outputs. The first is 1mV/Deg. The second is specified - , where:*
- mA = 4-20 mA output; **- V1** = 0/5 Vdc output; **- V2** = 0/10 Vdc output; **- K** = Thermocouple output, K type (For R1& R2 Temp range only); **- J** = Thermocouple output, J type (For R1 Temp range only)
† Cable lengths up to 4.5m are available. Add suffix - xm to part number, where x is length in metres, and £54/metre to price.