

# Convir OS1592 Series Infrared Fibre-Optic Temperature Sensor with Local Display and Analogue Output

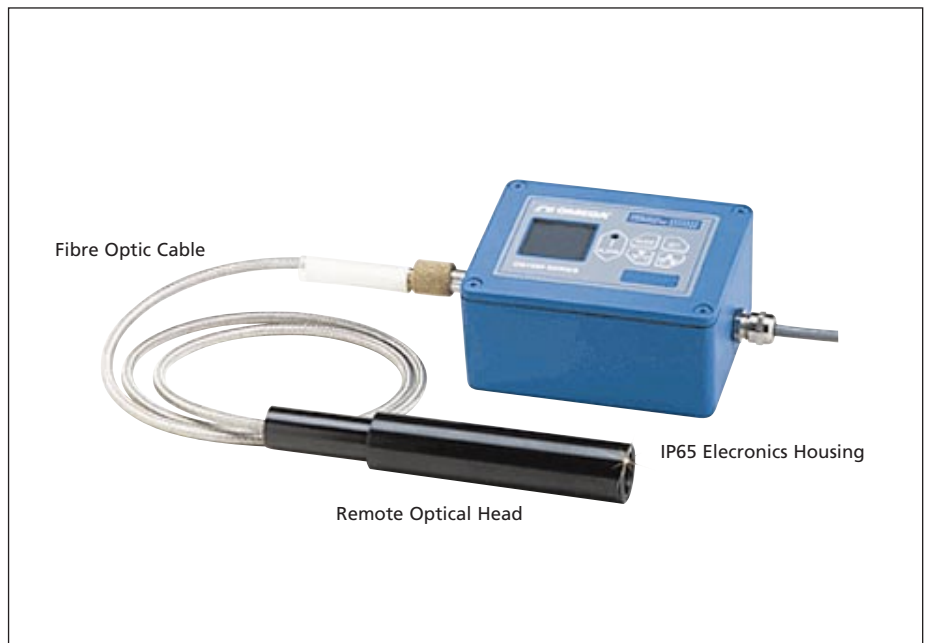
- ◆ For Both Hard to Reach and Polymer Bolt Applications
- ◆ Accuracy 1% of Reading
- ◆ Models with Temperature Ranges Measuring up to 2482°C
- ◆ Isolated Analogue Output, mV, °C or °F, and either Current, Voltage, Millivolt or Thermocouple Output
- ◆ °C/°F Keypad Selectable
- ◆ Local Backlit LCD Display 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 ms Response (0 to 63% of Final Value)
- ◆ Complete IP65 System
- ◆ Safe and Easy to Install
- ◆ Dual Analogue Outputs Isolated from Power Supply Input

The new Convir OS1592 Series infrared fibre optic temperature measurement system measures temperature ranges up to 2482°C and provides dual analogue outputs (4 to 20 mA, 0 to 5 V DC, 0 to 10 V DC, 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.

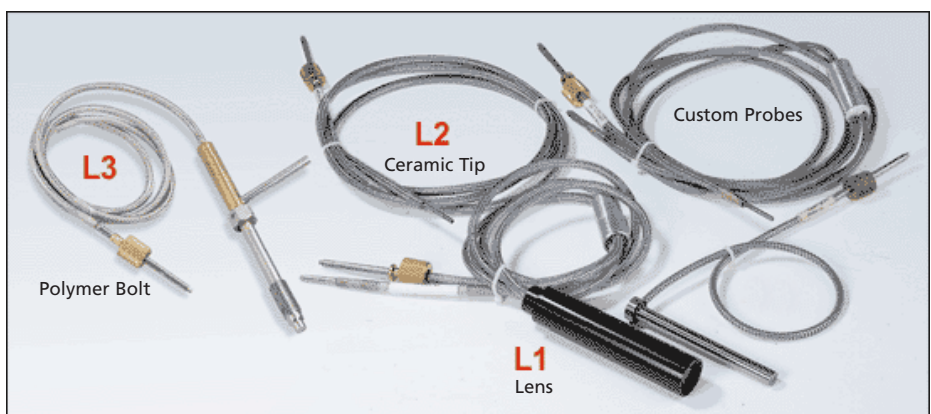
**Elektro-Trading sp. z o.o.**

44-109 Gliwice, ul. Mechanikow 9  
 Fax: +48 (0-32) 734-55-70  
 Tel: +48 (0-32) 734-55-72  
 E-mail: et@elektro-trading.com.pl  
 http://www.elektro-trading.com.pl



## GENERAL SPECIFICATIONS

<b>Temperature Range</b>	
-R1	260 to 538°C
-R2	538 to 1093°C
-R3	1093 to 2482°C
<b>Accuracy</b>	1% of rdg
<b>Repeatability</b>	0.75% of rdg
<b>Response Time</b>	25 ms (0 to 63% of final value)
<b>Emissivity</b>	0.05 to 1.00 adjustable, set via keypad
<b>Spectral Response</b>	0.8 to 1.8 µm
<b>Analogue Output</b>	1 mV/deg, standard
<b>Second Analogue Output</b>	0 to 5 V DC, 0 to 10 V DC, 4 to 20 mA, or Type J or K thermocouple
<b>Display</b>	Backlit Dual LCD
<b>Keypad</b>	4 position, tactile feedback membrane switch
<b>Calculated Temperature Values</b>	Maximum, minimum, differential
<b>High Alarm</b>	Set via keypad with built-in relay
<b>Relay Contact Rating</b>	5 A, 28 V DC
<b>Power</b>	18 to 36 V DC
<b>Operating Ambient Temperature</b>	0 to 50°C
<b>Enclosure</b>	Die cast aluminium, IP65
<b>Dimensions</b>	
<b>Main Housing</b>	8.9 W x 5.6 H x 11.4 L cm
<b>Optical Assembly</b>	
<b>L1- Lens</b>	2.5 Dia. x 15.9 cm
<b>L2- Ceramic Tip</b>	0.47 Dia. x 15.2 cm
<b>L3- Polymer Bolt</b>	0.95 Dia. x 10 cm



## ACCESSORIES

Accessories	Description
OS1500-BLS	Backlight Source
OS1500-BLF	Backlight Fibre Assembly to use with OS1500-BLS
OS1500-RC	Replacement Bulb
OS1592-MB	Mounting Bracket
OS1592-API	Air Purge Collar
DRN-PS-1000	DIN Rail Mount Power Supply. 90 to 240 V AC Input. 24V 1A DC Output

## TO ORDER (SPECIFY MODEL NO.)

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

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.

OS1590 Series backlit display and programmable key pad

