Convir
OS102 Series Low Cost Non-Contact Temperature Sensor with Built-in LED Display

◆ -18 to 538°C Range
◆ Adjustable Emissivity From 0.10 to 1.0
◆ Fast, Accurate, Repeatable Readings
◆ Built-in °F/°C Switchable LED Display
◆ 0 to 5 V DC, 4 to 20 mA or 1 mV/Deg. Analogue Outputs Available
◆ Rugged, Miniature Industrial Design with Remote Sensor Head
◆ User Adjustable High or Low Alarm Standard
◆ IP65 Metal Housing

The new Convir OS102 Series temperature measurement system features a remotely mounted infrared temperature sensor and high performance microprocessor based signal conditioner with built-in LED display.

The OS102's miniature sensor head design is ideal for measuring temperature in confined, hard-to-reach places and harsh environments. The sensor head is connected to the main electronics housing via a 1.8 m shielded cable, standard on all models.

The signal conditioner's main electronics are mounted in a rugged IP65 rated diecast aluminum housing and feature adjustable emissivity and linear voltage or current output calibrated for the temperature range of -18 to 538°C. A user adjustable high/low alarm output is standard on all models.

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Each OS102 comes complete with sensor head and 1.8 m cable, sensor head mounting nut, main electronics housing and operator's manual

GENERAL SPECIFICATIONS

Accuracy	±2% of reading or 2°C whichever is greater
Repeatability	±1% of reading
Spectral Range	8 to 14 µm
Response Time	150 ms (0 to 63% of final reading)
Emissivity Range	0.10 to 1.0
Field of View	6:1
Open Aperture	10 mm
Ambient Operating Range	
Main electronics	0 to 50°C
Sensor head	0 to 70°C
High temp sensor head option (-HT)	0 to 85°C
Sensor Head with Water Cool Jacket	0 to 200°C
Power	12 to 24 V DC
Alarm	Adjustable, open drain (100 mA)
Temperature Range	-18 to 538°C
Transmitter Output	1 mV/deg, 0 to 5 V DC or 4 to 20 mA
Display	Built-in LED, °F/°C switchable
Electronics Housing	IP65 diecast aluminium
Sensor Head Cable Length	1.8 m standard
Dimensions	11.4 x 6.3 x 5.6 cm
Weight	300 g
Sensor Head	2.5 dia. x 6.3 cm long with ¾ -16 UNF thread

ACCESSORIES

Model Number	Description
OS100-MB	Mounting Bracket
OS100-DR	DIN Rail Mounting Adaptor
OS100-AP	Air Purge Collar
OS100-WC	Water Cooling Jacket, up to 200°C
OS100-LS	Laser Sighting Accessory
OS100-CA15FT	Sensor Head Extension Cable 4.6 m
OS100-CA25FT	Sensor Head Extension Cable 7.6 m
TX8-100	Power / Output Cable 30 m
PSU-93-UK	DC Power Supply with UK Plug
PSU-93-EU	DC Power Supply with Euro Plug
CAL-80-IR	Traceable Calibration Certificate

TO ORDER (SPECIFY MODEL NO.)

Model Number	Description
OS102-MV-(*)	Transmitter with 1 mV/°C or °F output
OS102-V1	Transmitter with 0 to 5 VDC output
OS102-MA	Transmitter with 4 to 20 mA output
Models with High Temperature Sensing Head	
OS102-MV-(*)-HT	Transmitter with 1 mV/°C or °F output
OS102-V1-HT	Transmitter with 0 to 5 VDC output
OS102-MA-HT	Transmitter with 4 to 20 mA output

(*) Insert F for mV/°F or C for mV/°C output
Ordering Example: OS102-MA + OS100-LS + OS100-CA15FT, is a transmitter with 4 to 20 mA output, laser sighting accessory and 4.6 m sensor head extension cable.

Specifications subject to change without notice