# Convir **MLE Series Two-Piece Non-Contact Temperature** Sensor

The new MLE Series is a range of miniature infrared temperature sensors with separate electronics.

MLE sensors are capable of measuring temperatures in the range -20°C to 500°C and are available with either a current, voltage or thermocouple output.

Output	Model-X
4-20 mA	-0
0-50 mV	-1
0-100 mV	-2
J thermocouple	-3
K thermocouple	-4
1 mV/°C	-5
10 mV/°C	-6
0-5 V	-7

The miniature sensing head measures just 18 mm diameter x 45 mm. It is made of stainless steel, sealed to IP65, and will operate in ambient temperatures up to +70°C without additional cooling. This makes the MLE Series ideal for applications where there is only a small amount of room available to mount the sensor or the ambient temperature around the sensing head is higher than normal.

The electronics module measures 98 mm x 64 mm x 34 mm. It is made of die-cast aluminium, sealed to IP65, and will operate in ambient temperatures up to +50°C. It is powered from a 24 VDC (28 VDC max) power source.

The emissivity setting is fixed at 0.95, making the MLE Series suitable for the majority of applications where the target is made of a non-reflective material such as paper, plastic, rubber, cloth, food etc. or it can be used to measure metals that are painted, anodised or oxidised.

# Elektro-Trading sp. z o.o.

44-109 Gliwice, ul.P.Gojawiczynskiej 13 Fax: +48 (0-32) 330-45-74 Tel: +48 (0-32) 330-45-70 E-mail: et@elektro-trading.com.pl http://www.elektro-trading.com.pl



### **GENERAL SPECIFICATIONS**

		Temperature Range (other ranges to order)				
		-20°C to 100°C	0°C to 250°C	0°C to 500°C		
-of-View	2:1	MLE21LT-X	MLE21MT-X	_		
	10:1	MLE101LT-X	MLE101MT-X	MLE101HT-X		
Field	30:1	MLE301LT-X	MLE301MT-X	MLE301HT-X		

±1% of reading or ±1°C whichever is greater

±0.5% of reading or ±0.5°C whichever is greater

Output Accuracy Repeatability Emissivity Response Time, t<sub>90</sub> **Spectral Range** Power Min. Sensor Voltage Max. Loop Impedance **Output Impedance** 

## **MECHANICAL**

Construction Dimensions Thread Mounting

Cable Length Weight with Cable

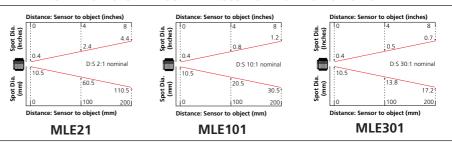
#### **ENVIRONMENTAL**

**Environmental Rating Relative Humidity** 

#### **ACCESSORIES**

- Fixed mounting bracket
- Adjustable mounting bracket
- ٠ Air purge collar
- Laser sighting tool ٠
- Portable calibration checker ٠

DIAMETER OF TARGET SPOT MEASURED VERSUS DISTANCE FROM SENSING HEAD



294 g

1 m

See table

Fixed at 0.95

8 to 14 µm

SENSING HEAD

**Stainless Steel** 

9 V DC

200 ms (90% response)

24 V DC (28 V DC max)

750 Ω (4-20 mA output)

50  $\Omega$  (voltage/thermocouple output)

18 mm diameter x 45 mm long

16 mm diameter x 1 mm pitch

IP65 Ambient Temperature Range 0°C to 70°C (sensing head), 0°C to 50°C (electronics module) 95% max. non-condensing

#### **OPTIONS**

- Longer sensor cable (5 m max.)
- Certificate of calibration
- Combined thermocouple extension/power cable

**ELECTRONICS MODULE** 

98 mm x 64 mm x 34 mm

Die-cast Aluminium