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.

Calex Electronics Limited

PO Box 2, Leighton Buzzard Bedfordshire, England LU7 4AZ Tel: +44 (0)1525 373178/853800 Fax: +44 (0)1525 851319 Lo-call Tel: 0845 3108053 E-mail: info@calex.co.uk Online: http://www.calex.co.uk



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		

Output See table

Accuracy ±1% of reading or ±1°C whichever is greater Repeatability ±0.5% of reading or ±0.5°C whichever is greater

Emissivity Fixed at 0.95 Response Time, t₉₀

200 ms (90% response)

Spectral Range 8 to 14 µm

24 V DC (28 V DC max) Power

Min. Sensor Voltage 9 V DC

Max. Loop Impedance 750 Ω (4-20 mA output)

Output Impedance 50 Ω (voltage/thermocouple output)

MECHANICAL

SENSING HEAD Construction Stainless Steel Dimensions 18 mm diameter x 45 mm long **Thread Mounting** 16 mm diameter x 1 mm pitch

Cable Length 1 m Weight with Cable 294 g

ENVIRONMENTAL

Environmental Rating

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

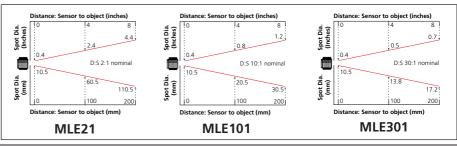
ACCESSORIES

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

OPTIONS

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

DIAMETER OF TARGET SPOT MEASURED VERSUS DISTANCE FROM SENSING HEAD



ELECTRONICS MODULE

98 mm x 64 mm x 34 mm

Die-cast Aluminium