CYRONIX 416 444-6614

www.cyronix.com

Raytek® Thermalert® MID™ Series

Infrared Temperature Monitoring System



Highlights

- Small sensing head fits where other sensors can't
- Ambient operating range to 185°F (85°C) without cooling
- 5-digit backlit LCD display for set-up
- Adjustable emissivity, peak hold, valley hold, and averaging
- 1% Accuracy from -40 to 1112°F (-40 to 600°C)
- Choice of 2:1 or 10:1 optics
- Interchangeable sensing head
- Powered by 12-24 VDC at ≤100 mA
- Cooling and purging accessories

MID - Standard model, selectable 4-20mA/0-20mA, 0-5V, or J/K thermocouple output, head temperature signal, adjustable emissivity, transmissivity, and peak/valley/averaging

Choose One Optical Sensor:

MID02 - 2:1 optical sensor with 3.2ft (1m) standard cable

MID10 - 10:1 optical sensor with 3.2ft (1m) standard cable

MEASUREMENT SPECIFICATIONS

Spectral Response:	8 to 14 microns
Optical Resolution:	2:1 or 10:1
Temperature Range:	-40 to 1112°F (-40 to 600°C); -13 to 1112°F (-25 to 600°C) for J-thermocouple output
System Accuracy:	±1% of reading or ±2°F (±1°C) whichever is greater, @ 73°F ±9°F (23°C ±5°C). Thermocouple output accuracy ±1% or reading or ±4.5°F (±2.5°C), whichever is greater
System Repeatability:	±0.5% of reading or 1°F (±0.5°C) whichever is greater
Temperature Coefficient:	0.15K per K or 0.15% per K, whichever is greater*
Temperature Resolution:	0.5°F or 0.3°C
System Response Time:	(95%) 150ms
Emissivity	0.100 to 1.00 digitally adjustable increments of .001
Transmission:	0.100 to 1.00 digitally adjustable increments of .001
Signal Processing:	Peak Hold, Valley Hold, Variable Averaging Filter, adjustable up to 998 sec

**NIST/DKD certified instruments available with 0.05K per K*

CE

ISO 9001 Certified

GENERAL SPECIFICATIONS

Environmental Rating:	NEMA-4 (IP 65)
Ambient Temperature Range:	
Sensing head	32 to 185°F (0 to 85°C)
With air cooling	0 to 392°F (-18 to 200°C)
Electronics housing	32 to 150°F (0 to 65°C)
Storage Temperature:	0 to 185°F (-18 to 85°C)
Relative Humidity:	10 to 95%, non-condensing
Construction:	
Sensing Head	Stainless steel
Electronics housing	Zinc, die-cast
Weight:	
Sensing Head (with 3 ft/1 m cable)	1.75 oz (50 g)
Electronics housing	9.5 oz (270 g)

ELECTRICAL SPECIFICATIONS

Outputs:	Scalable 4-20mA, 0-20mA, 0-5V, J or K thermocouple 10mV/°C Head Ambient signal
Cable Length	3.2 ft (1m) standard, longer cables optional
Output Impedance (T/C output)	20 ohm
Minimum Load Impedance (mV output)	100K ohms
Maximum Loop Impedance (mA output)	500 ohms with 24 VDC power supply
Current Draw	100mA
Power Supply:	11-26 VDC

ACCESSORIES/OPTIONS*

Each standard MID package includes a sensing head, one mounting nut, 3.2 ft (1 m) of cable, die-cast housing with premounted electronics, and an operator's manual

- Adjustable or fixed mounting bracket
- Air purge jacket
- Longer cables: 50 ft maximum (15 m maximum)*

**Must be specified at time of order*