

**FLUKE**<sup>®</sup>

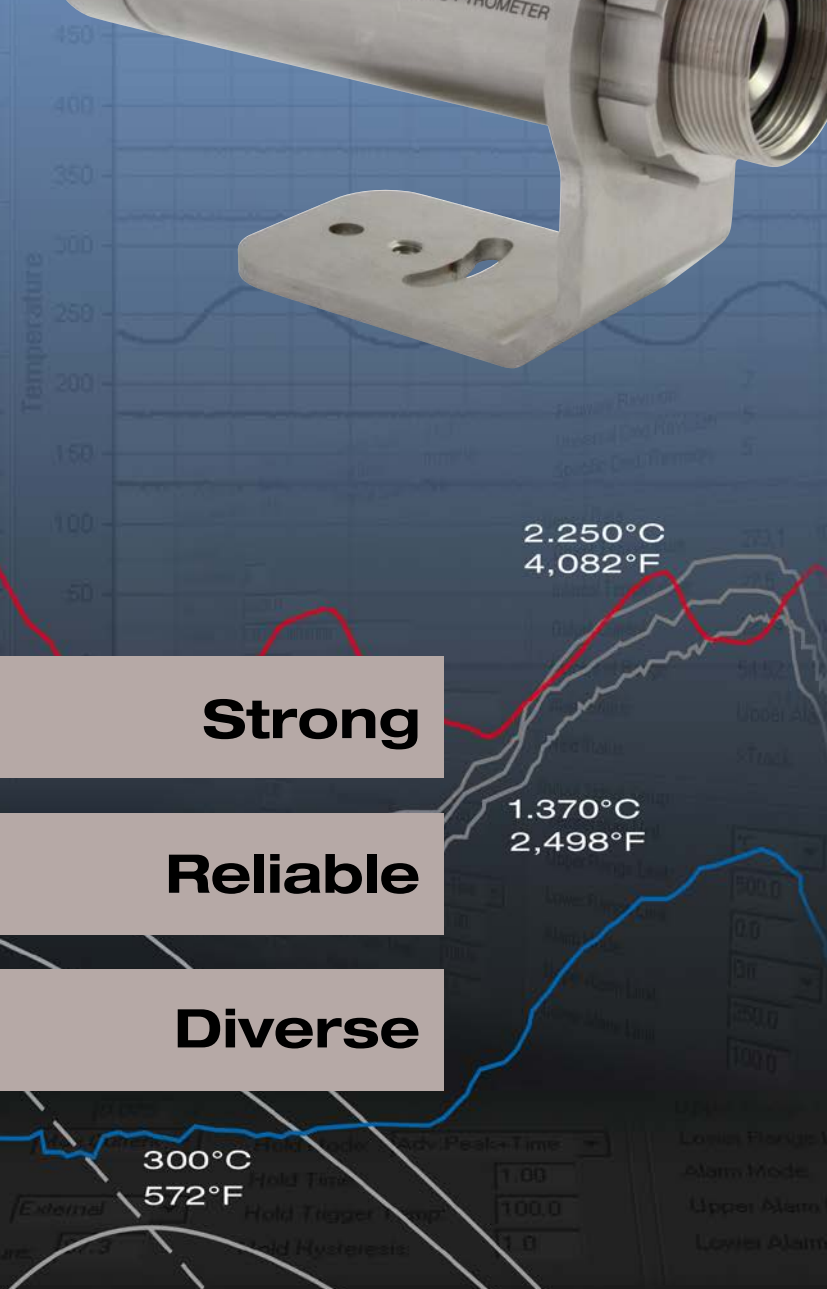
**Process  
Instruments**

# Thermalert<sup>®</sup> 4.0 Series

## Infrared Pyrometers



131°C  
Uyon  
320°C  
Product  
269°C



**Strong**

**Reliable**

**Diverse**

Ambient Control External Ambient Temperature

Hold Time

Hold Trigger

Hold Hysteresis

Peak-Time


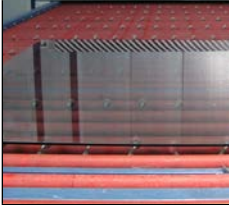




1.00
100.0
1.0

Lower Alarm Limit

Alarm Mode

Upper Alarm Limit

Lower Alarm Limit

LT	G5	G7	P3	P7	MT
-40 to 1000 °C (-40 to 1832 °F)	250 to 2250 °C (482 to 4082 °F)	300 to 900 °C (572 to 1652 °F)	25 to 450 °C (77 to 842 °F)	10 to 360 °C (50 to 680 °F)	200 to 2250 °C (392 to 4082 °F)
8 to 14 µm	5 µm	7.9 µm	3.43 µm	7.9 µm	3.9 µm
up to 70:1	up to 70:1	up to 70:1	20:1	33:1	up to 70:1
Low temperature applications, such as thick plastics, asphalt, carpeting, coated paper, thermoforming, food, coke, coal and cement	Glass surface temperature for bending, tempering, annealing and sealing	Ultra-thin drawn glass	Extrusion and converting of thin films like polyethylene, polypropylene, and polystyrene thin films	Production and converting of films of polyester (PET), fluoroplastic, Teflon®, acrylic, nylon (polyamide), polyurethane, PVC	Furnace refractory, flame hardening and brazing
					

## The strong, reliable, diverse solution... saving you time and money



### Strong

Built for use in harshest environments, the Thermalert 4.0 Pyrometer withstands ambient temperatures up to 85 °C (185 °F) without extra cooling. The sensor supports many wavelengths and can be used for a broad range of applications. Intrinsically safe models are available for use in potentially explosive areas (dust, gas).

### Reliable

Designed to handle wider temperature ranges, this infrared sensor comes with superior in class optical resolution. 2-wire loop powered RS-485 as well as digital (Ethernet, EtherNet/IP, PROFINET IO) and analog outputs are available to meet your process requirements. Galvanic isolated outputs ensure correct readings.

### Diverse

- Sensors are rugged, smart and easy-to-install
- Laser sighting available for all instruments
- Backward compatibility with legacy sensors and accessories
- Broad range of accessories available (high temperature enclosures, cables, etc.)
- 2-year warranty

The Thermalert 4.0 Series Pyrometers provide accurate temperature measurements for a wide variety of process control applications. With various types of communications, the Thermalert 4.0 sensor with laser aiming, provides the features you need to control your process in a compact, integrated package that is easy to install and operate.



Thermalert 4.0 with 12-pin connector supporting comprehensive input/output capabilities





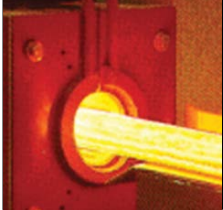


Thermalert 4.0 supports 2-wire loop for simultaneous power supply and analog output



Thermalert 4.0 with 6-pin terminal providing analog out and RS-485 communications

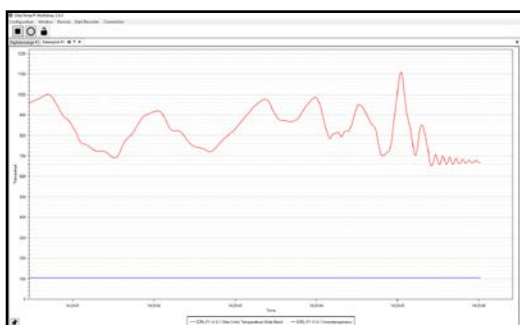
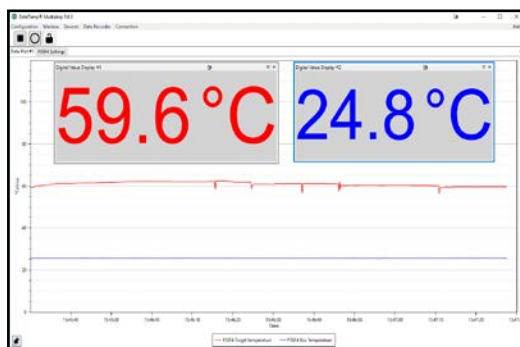


Thermalert 4.0 with 4-pin connector providing PROFINET IO and EtherNet IP (certified)

HT	3M	2M	1M	CO2	CO	NOX
500 to 2000 °C (932 to 3632 °F)	100 to 600 °C (212 to 1112 °F)	250 to 1400 °C (482 to 2552 °F)	500 to 2300 °C (932 to 4172 °F)	120 to 1650 °C (250 to 3002 °F)		
2.2 μm	2.3 μm	1.6 μm	1 μm	4.24 μm	4.64 μm	4.47 μm
60:1	70:1	150:1	150:1	33:1		
Ferrous and nonferrous metals, induction heating, furnaces, laboratory research	Rolling mills, wire coating and annealing, laser welding, plastic tubing extensions	Non ferrous and unoxidized metals, galvanizing lines and steel annealing	Semiconductor, metals forging, molten glass	Flame or flue gas temperature measurement for incineration plants, boilers or power station		
	 Courtesy of Trumpf, Ditzingen					

**Software**

DataTemp® Multidrop software provides you with the tools you need to configure your sensors - then monitor temperatures on a real-time graphical display. The bar graph feature shows temperature profiles across a web or at various spots along a process. Use the program to record and archive your process temperatures. High and low alarms are shown, making it easy to identify out of range conditions.



**Accessories**

A wide variety of options and accessories are available to customize the installation of your Thermalert 4.0 Pyrometer.

Lens protectors and air purge collars offer protection in harsh environments. The Water-/air-cooled housings can be specified for operation in ambient temperatures up to 175 °C (315 °F).



For extremely harsh environments, the ThermoJacket is recommended.

This rugged cast aluminum housing protects the sensor in ambient temperatures up to 315 °C (600 °F). It completely encloses the sensor, combining thermal and mechanical protection with air purging of the lens. The Thermalert 4.0 Pyrometer can be installed or removed while the ThermoJacket is in its mounted position.




*The ThermoJacket protective enclosure enables use in ambient temperatures up to 315 °C (600 °F).*

**Key Features**

- Durable stainless steel IP65 / NEMA4 enclosures designed to withstand ambient temperatures from -20 °C to 85 °C (-4 °F to 185 °F)
- Integrated laser sighting
- Galvanic isolated outputs
- Plastic lens option for food applications
- Analog input for ambient compensation and adjusting emissivity setting
- Multiple interfaces
  - 2-wire loop powered for analog communication
  - 12-wire M16 and 6-pin terminal block for digital communication (RS485)
- 4-wire Fieldbus
- Ethernet, EtherNet/IP, PROFINET IO
- HART Protocol optional
- Wide temperature ranges from -40 °C to 2300 °C (-40 °F to 4172 °F)
- Advanced signal processing
- Wide choice of focus distances
- ATEX/IECEX/CCC-IS certified models available

**Compatibilities**

Easy to upgrade from existing Raytek TX, XR or Marathon and Ircon Modline® 4 or 7 series installations. Direct fittings in old installation or adapter accessories allow you to use existing accessories.



In the heat of the moment, what is the temperature? Not knowing can mean the investment and labor of everyone and every material involved in the manufacturing process, from the raw to the finished product, is at risk. We take the heat and tell you its temperature. Precisely, accurately, and with the greatest of detail, all to ensure our customers' promise of quality is delivered.

We are Raytek, Ircon, and Datapaq. Combined, we have over 150 years of experience in temperature measurement. Individually, we have earned the respect of manufacturing's most valued names.

Together, we are Fluke® Process Instruments - a triad of the top performing, innovative, most rugged and dependable noncontact temperature measurement and profiling equipment made - a complete line of infrared sensors, line scanners, thermal imagers and profiling systems for use in today's most demanding environments.

Raytek, Ircon, and Datapaq. The first names in temperature control have become the last word in manufacturing with confidence:

**Fluke Process Instruments**

**The Fluke Process Instruments Guarantee**

The Thermalert 4.0 Series is supported by a 2 year warranty. With a network of trained representatives and agents in over one hundred countries and offices located in the U.S., Germany and China, we provide local service and support.

**Fluke Process Instruments**

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**Worldwide Service**

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