



# Raynger 3i

## Low Temperature, Long Range, and Close Focus Models

General purpose Raynger 3i models handle a variety of maintenance and quality control applications. Choose the 3i that matches your temperature range and optical requirements, then pick the sighting option that best meets the needs of your specific application.

### Standard Features

In addition to displaying real-time temperature, the Raynger 3i calculates Maximum, Minimum, Difference and Average temperatures, while the Recall feature allows you to access the last temperature reading. The 3i also compensates for energy reflected by the background around your target so it doesn't affect your reading. The backlit display is easy to read under poor lighting conditions. A locking trigger allows continuous operation, while adjustable HI/LO alarms signal over- and under-range temperature conditions. Each 3i is equipped with a padded nylon carrying case, shoulder strap, and tripod mount.

The 3i can also store up to 100 data points in an on-board datalogger, eliminating the need for clipboards, recording devices, or other peripheral hardware. Data output from the 3i provides a direct interface to chart recorders and printers. All models are equipped with an output jack capable of providing either analog or digital signals.

The 3i gives you a choice of laser output. L2 models meet FDA Class II and IEC Class 2 requirements. L3 models meet the requirements of FDA Class IIIa.

### Innovative Sighting Options

Because no single sighting system works best for every application, the Raynger 3i offers you a choice of sighting options. See page 2 for more information.

### Applications

- Utilities
- Plant maintenance
- Electrical maintenance
- Asphalt and roofing
- Paper production
- Rubber production

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# Raynger 3i Portable Noncontact Thermometers

## Features

Optical resolution (D:S): LT 75:1 • LR 120:1 • LRL2SC 105:1  
 Adjustable emissivity from 0.10 to 1.00 in 0.01 increments  
 Laser sighting: L2 models are IEC Class 2/FDA Class II (<1mW) and L3 models are FDA Class IIIa (<5mW)  
 Audible/visible HI/LO alarms  
 Calculates MAX, MIN, DIF, and AVG temperatures  
 Analog output: 1mV/°C or 1mV/°F (selectable)  
 Digital output: RS232, 9600 baud, output interval adjustable from 1 to 9999 seconds  
 100 points of data logging  
 Padded nylon carrying case and shoulder strap  
 Tripod mount

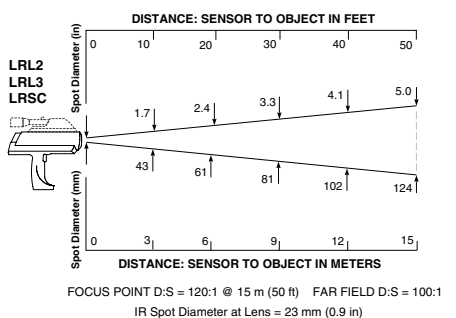
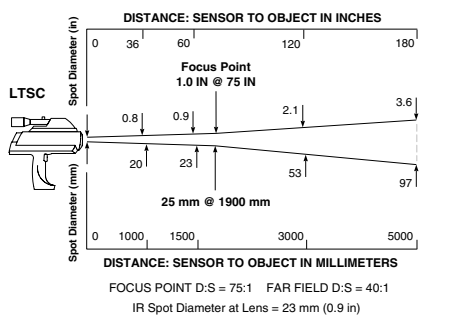
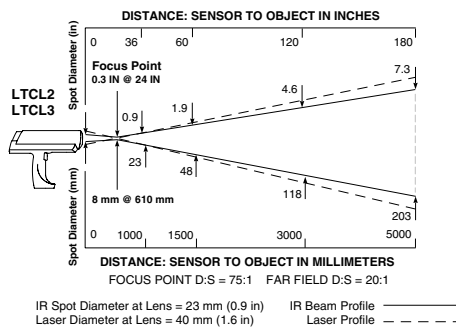
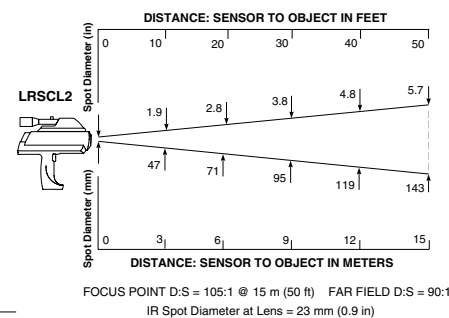
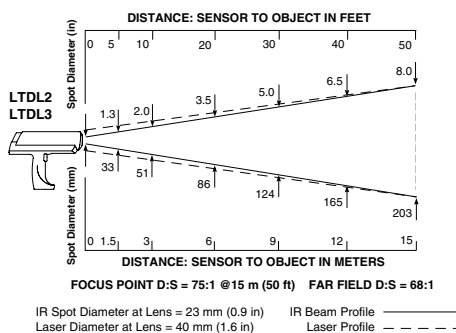
## Specifications

Temperature range	-30 to 1200°C (-20 to 2200°F)
Accuracy	±1% of reading or ±1°C (±1.5°F), whichever is greater at 23°C ±5°C (73°F ±9°F) ambient operating temperature
Repeatability	±0.5% of reading or ±1°C (±1°F), whichever is greater
Response time (95%)	700 mSec
Spectral response	8 to 14 μm
Display resolution	1°C or 1°F (selectable), multifunction 4-digit backlit LCD
Ambient operating range	0 to 50°C (32 to 120°F)
Relative humidity	10 to 95%, noncondensing @ up to 30°C (86°F)
Storage temperature	-20 to 50°C (-4 to 120°F) without batteries
Power	4 AA batteries or 6-9 V, 200 mA DC power supply
Analog output resolution	1 °C or °F
Dimensions/Weight:	
Laser models	208 H x 257 L x 71 W mm / 794 g (8.2 H x 10.1 L x 2.8 W in / 1.75 lb)
Scope models	244 H x 257 L x 71 W mm / 1000 g (9.6 H x 10.1 L x 2.8 W in / 2.21 lb)

## Options/Accessories

- NIST Certification (Must be specified at time of order.)
- Variable brightness filter (scope only)
- 110V/60Hz or 220V/50Hz voltage adapters
- Portable printer
- Computer, analog and printer cables
- DataTemp 2 software

## Optical Resolution



## Sighting Options

**Single Laser (L2, L3):** The single laser is designed for accuracy over distance. Single laser models pinpoint the center of your target area with a bright laser spot.

**Dual Laser (DL2, DL3):** The dual laser indicates the diameter of the target area measured with two glowing spots.

**Crossed Laser (CL2, CL3):** For precise measurement of smaller targets, minimum measurement spot is indicated at the point the two laser beams meet.

**Scope and Scope with Laser (SC, SCL2):** Measure temperature at a distance in bright daylight. At the focus point, 3i scopes are parallax-free and provide circular reticles for pinpoint accuracy. To enhance the sighting capabilities of the scope, try a combined scope with laser model.



Specifications are subject to change without notice.



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