# **Temperature, Humidity Testers & Thermometers**

# Infrared Thermometers



## PIT1

- 1:1 Optical Ratio
- Pocket Size
- Min/Max Measurements

Laser Infrared Thermometers offer precise, non-contact measurement in a lightweight, hand held instrument. With one hand operation, they are ideal for a wide variety of applications.

#### **Applications**

- · Refrigeration Systems
- Heating Systems
- Supply and Return Registers
- Circuit Breaker Panels
- Motors/Bearings
- Transformers
- Ducts
- And More



## LIT6

- 6:1 Optical Ratio
- Laser Pointer
- Backlight



## LIT8B

- 8:1 Optical Ratio
- · Laser Pointer
- Trigger Style
- Backlight
- Minimum/Maximum Measurements



## LIT11TC

- 11:1 Optical Ratio
- Laser Pointer
- High & Low Temperature Range
- Backlight
- · Carrying Case Included
- K-Type Thermocouple (probe included)
- Temperature Range 58°F to 482°F

(14°C to 250°C)

Full range:

-83.2°F to 1999°F

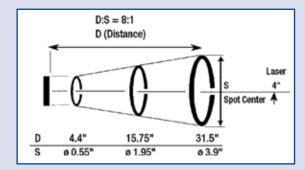
(-64°C to 1400°C)

Temperature Accuracy <u>+</u>1% of reading or 2°F

## **Application Note:**

#### What is Distance to Spot Ratio (D:S)?

This is the size of the measurement field that a non-contact infrared thermometer uses to provide a temperature reading. The infrared thermometer averages the temperature of that field to calculate the temperature reading. For example, a D:S ratio of 8:1 means that the measurement field measures approximately 1 foot in diameter when the target is approximately 8 feet away.



#### **Emissivity:**

The ability of a surface to reflect the infrared radiation relative to an ideal surface. A flat black surface is as close to ideal as you can get. Most infrared thermometers have a fixed emissivity of .95. The more reflective the surface the lower the emissivity adjustment should be.

## **Infrared Specifications**

|                    | PIT1                      | LIT6                      | LIT8B                     | LIT11TC            |
|--------------------|---------------------------|---------------------------|---------------------------|--------------------|
| Optical Ratio      | 1:1                       | 6:1                       | 8:1                       | 11:1               |
| Temperature Range  | -27°F to 428°F            | 0°F to 500°F              | -4°F to 662°F             | -76 °F to 932°F    |
|                    | (-33°C to +220°C)         | (-18°C to 260°C)          | (-20°C to 350°C)          | (-60°C to 500°C)   |
| Best Resolution    | .1°F (.1°C)               | .1°F (.1°C)               | 1°F (1°C)                 | .1°F (.1°C)        |
| Accuracy           | <u>+</u> 2% of reading or | <u>+</u> 2% of reading or | <u>+</u> 2% of reading or | <u>+</u> 2°F       |
|                    | +4°F (2°C)                | +4°F (2°C)                | <u>+</u> 4°F (2°C)        | ( <u>+</u> 1°C)    |
| Emissivity         | 0.95 adjustable           | 0.95 fixed                | 0.95 fixed                | 0.95 adjustable    |
| Automatic shut off | Yes                       | Yes                       | Yes                       | Yes                |
| Power Supply       | CR2032                    | 9V Battery                | 9V Battery                | 2 AAA Batteries    |
|                    | (Included)                | (Not Included)            | (Included)                | (Included)         |
| Weight             | 1.3 oz. (32g)             | 5.3 oz. (150g)            | 5.8 oz. (180g)            | 6.3 oz. (179g)     |
| Dimensions         | .7" X 1.5" X 2.7"         | 5.1" X 2" X 1.25"         | 6.4" X 3.2" X 2.4"        | 6.9" X 1.5" X 2.8" |
|                    | (18mm X 37mm X 68mm)      | (18mm X 50mm X 42mm)      | (159mm X 79mm X 57mm)     | (175 X 39 X 71mm)  |