

# Infrared Thermometers

## How to choose the right model



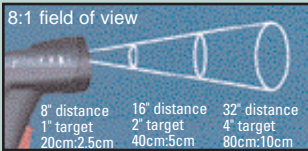
**What is the temperature range you will measure?**

We offer temperature ranges from as low as -50°C (-58°F) to as high as 3000°C (5400°F).

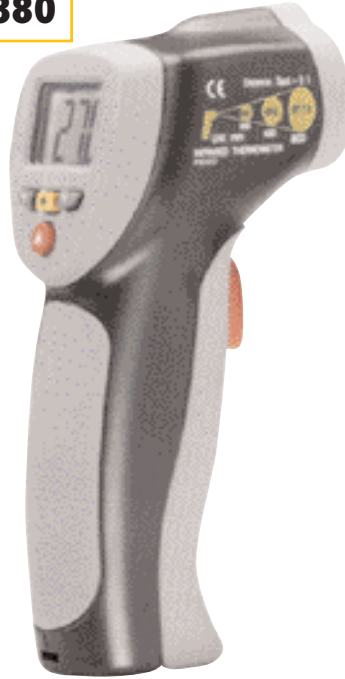
**How large is the target? How close can you get?**  
Optical resolution is defined by the ratio between the distance from the object being measured to the size of the object being measured (D:S). The greater the D:S ratio, the higher the optical resolution. A thermometer with a higher resolution allows you to measure smaller objects from greater distances.

**What material will you be measuring?**

Infrared thermometers work by measuring emitted infrared (IR) energy from a target object and translates the value into temperature. Emissivity is the ability of the material surface to emit IR energy. Most organic, painted, or oxidized surfaces have emissivity values close to 0.95. Some of our thermometers have adjustable emissivity to ensure accuracy when measuring other materials such as metals, glass, and thin film plastics.



**\$129**  
**ST-880**



**Model ST-880**

**A portable, easy-to-use, compact-sized, digital infrared thermometer.**

- Unique flat surface and modern housing design
- Wide temperature range from -58 to 536°F (-50 to 280°C)
- User selectable °F or °C
- Built in laser pointer identifies target area
- Backlighting illuminates display for taking measurements at night or in areas with low background light levels
- Overrange indicator, Auto data hold (when trigger released) & Auto shut off
- Fixed 0.95 emissivity covers 90% of surface applications
- Includes battery and carrying case

**\$149**  
**ST-882**



**Model ST-882**

**Pocket-sized and easy-to-use - just point, shoot and read.**

- Unique flat surface and modern housing design
- Wide temperature range from -58 to 1022°F (-50 to 550°C)
- User selectable °F or °C
- Built in laser pointer identifies target area
- Backlighting illuminates display for taking measurements at night or in areas with low background light levels
- Overrange indicator, Auto data hold (when trigger released) & Auto shut off
- Fixed 0.95 emissivity covers 90% of surface applications
- Includes battery and carrying case

## Specifications

### Model

Temperature Range

Display Resolution

Basic Accuracy

Emissivity

Optical Resolution

Response Time

Display

Power Supply

Dimensions

Weight

Price

### ST-880

-58 to 536°F/-50 to 280°C

1°F/1°C

±2% of reading

Fixed at 0.95

8:1 distance to spot size ratio

< 1 second

Backlit LCD

1 x 9V battery

6.3 x 3.2 x 1.6"/160 x 82 x 41 mm

6.4 oz/177 g

**\$129**

### ST-882

-58 to 1022°F/-50 to 550°C

0.1° up to 200°; 1° over 200°

±2% of reading

Fixed at 0.95

8:1 distance to spot size ratio

< 1 second

Backlit LCD

1 x 9V battery

6.3 x 3.2 x 1.6" (160 x 82 x 41 mm)

6.4 oz (177 g)

**\$149**

# Infrared Thermometers

**\$225**  
**ST-8818**



**\$255**  
**ST-8819**



**\$225**  
**ST-616CT**



## Model ST-8818

**A compact infrared thermometer with a wide temperature range & laser sighting.**

- Temperature range to 1022°F / 550°C
- User selectable °F or °C
- Built in laser pointer identifies target area
- 12 :1 distance to spot ratio measures smaller surface areas at a greater distance
- Unique flat surface and modern housing design
- Backlighting illuminates display for taking measurements at night or in areas with low background light levels
- Overrange indicator, Auto data hold (when trigger released) & Auto shut off
- Fixed 0.95 emissivity covers 90% of surface applications
- Includes battery and carrying case

## Model ST-8819

**A rugged thermometer with a 12:1 distance to target ratio and laser sighting.**

- High temperature range to 1382°F / 750°C
- User selectable °F or °C
- Built in laser pointer identifies target area
- 12 :1 distance to spot ratio measures smaller surface areas at a greater distance
- Unique flat surface and modern housing design
- Backlighting illuminates display for taking measurements at night or in areas with low background light levels
- Overrange indicator, Auto data hold (when trigger released) & Auto shut off
- Fixed 0.95 emissivity covers 90% of surface applications
- Includes battery and carrying case

## Model ST-616CT

**An easy-to-use infrared thermometer and humidity meter in one compact unit.**

- Temperature Range: -58 to 932°F / -50 to 500°C
- User selectable °F or °C
- Humidity Range: 0 to 100% RH, 0.1% RH resolution
- ±3.5% RH accuracy
- Large, easy to read, backlit LCD with dual display
- Max & Hold function, Auto shut off
- Fixed 0.95 emissivity covers 90% of surface applications
- Includes battery and carrying case

### ST-8818

-58 to 1022°F/-50 to 550°C  
0.1° up to 200°; 1° over 200°  
±2% of reading  
Fixed at 0.95  
12:1 distance to spot size ratio  
< 1 second  
Backlit LCD  
1 x 9V battery  
9 x 3.9 x 2.2"/230 x 100 x 56 mm  
10.2 oz/290 g

**\$225**

### ST-8819

-58 to 1382°F/-50 to 750°C  
0.1° up to 200°; 1° over 200°  
±2% of reading  
Fixed at 0.95  
12:1 distance to spot size ratio  
< 1 second  
Backlit LCD  
1 x 9V battery  
9 x 3.9 x 2.2"/230 x 100 x 56 mm  
10.2 oz/290 g

**\$255**

### ST-616CT

-58 to 932°F/-50 to 500°C  
0.1° up to 200°; 1° over 200°  
±2% of reading  
Fixed at 0.95  
8:1 distance to spot size ratio  
< 1 second  
Dual backlit LCD  
1 x 9V battery  
5.9 x 2.8 x 1.4"/150 x 72 x 35 mm  
7.4 oz/210 g

**\$225**

# Infrared Thermometers



**REED**  
Non-contact, laser sighting, infrared thermometers point-and-measure technology provides fast, easy & accurate readings of most surface temperature measurements

**\$165**  
**IR-77**



**Model IR-77**

**A portable, easy-to-use, pocket-sized, digital infrared thermometer.**

- Temperature Range: -22 to 518°F / -30 to 270°C
- User selectable °F or °C
- Large LCD Backlit display
- Fixed 0.95 emissivity covers 90% of surface applications
- Auto data hold & Auto shut off
- Optional carrying case can be ordered separately

**\$98**  
**IR-88**



**Model IR-88**

**Pocket-sized, troubleshooting infrared thermometer with laser sighting.**

- Temperature Range: -4 to 518°F / -20 to 270°C
- User selectable °F or °C
- Auto data hold, Max hold & Auto shut off
- Fixed 0.95 emissivity covers 90% of surface applications
- Built in laser pointer identifies target area
- Overload and low battery indication
- Optional carrying case can be ordered separately

## Accessories

Model CA-03 Carrying Case for IR Models Price \$18

Model C-820 Carrying Case for ST Models Price \$18

## Specifications

Model	IR-77	IR-88
Temperature Range	-22 to 518°F/-30 to 270°C	-4 to 518°F/-20 to 270°C
Display Resolution	1°F/1°C	1°F/1°C
Basic Accuracy	±2.5% of reading	±2.5% of reading
Emissivity	Fixed at 0.95	Fixed at 0.95
Optical Resolution	6:1 distance to spot size ratio	6:1 distance to spot size ratio
Response Time	< 1 second	< 1 second
Display	Backlit LCD	LCD
Power Supply	1 x 9V battery	1 x 9V battery
Dimensions	3.7 x 2.1 x 1"/94 x 56 x 28 mm	3.7 x 2.1 x 1"/94 x 56 x 28 mm
Weight	2.7 oz/76 g	2.7 oz/76 g
Price	<b>\$165</b>	<b>\$98</b>

# Infrared Thermometers

**\$119**  
**ST-8810**



**\$129**  
**ST-8811**



**\$139**  
**ST-8812**



## Model ST-8810

**A compact infrared thermometer with a built-in laser pointer.**

- Temperature Range: -4 to 518°F / -20 to 270°C
- User selectable °F or °C
- Built-in laser pointer
- Backlighting illuminates display for taking measurements at night or in areas with low background light levels
- Auto data hold (when trigger released) & Auto shut off
- Fixed 0.95 emissivity covers 90% of surface applications
- Optional carrying case can be ordered separately

## Model ST-8811

**A compact, yet rugged, infrared thermometer with laser sighting.**

- Temperature Range: -4 to 842°F / -20 to 450°C
- User selectable °F or °C
- Built-in laser pointer
- Backlighting illuminates display for taking measurements at night or in areas with low background light levels
- Audible and visible overrange indications
- Auto data hold (when trigger released) & Auto shut off
- Fixed 0.95 emissivity covers 90% of surface applications
- Optional carrying case can be ordered separately

## Model ST-8812

**This infrared thermometer features a wide measuring range and laser sighting.**

- Temperature Range: -58 to 932°F / -50 to 500°C
- User selectable °F or °C
- Built-in laser pointer
- Backlighting illuminates display for taking measurements at night or in areas with low background light levels
- Automatic ranging
- Audible and visible overrange indications
- Auto data hold (when trigger released) & Auto shut off
- Fixed 0.95 emissivity covers 90% of surface applications
- Optional carrying case can be ordered separately

### ST-8810

-4 to 518°F/-20 to 270°C

1°F/1°C

±2% of reading

Fixed at 0.95

8:1 distance to spot size ratio

<1 second

Backlit LCD

1 x 9V battery

6.25 x 3.1 x 2.25"/159 x 79 x 57 mm

6.3 oz/180 g

**\$119**

### ST-8811

-4 to 842°F/-20 to 450°C

1°F/1°C

±2% of reading

Fixed at 0.95

8:1 distance to spot size ratio

<1 second

Backlit LCD

1 x 9V battery

6.25 x 3.1 x 2.25"/159 x 79 x 57 mm

6.3 oz/180 g

**\$129**

### ST-8812

-58 to 932°F/-50 to 500°C

0.1° up to 200°; 1° over 200°

±2% of reading

Fixed at 0.95

8:1 distance to spot size ratio

<1 second

Backlit LCD

1 x 9V battery

6.25 x 3.1 x 2.25"/159 x 79 x 57 mm

6.3 oz/180 g

**\$139**