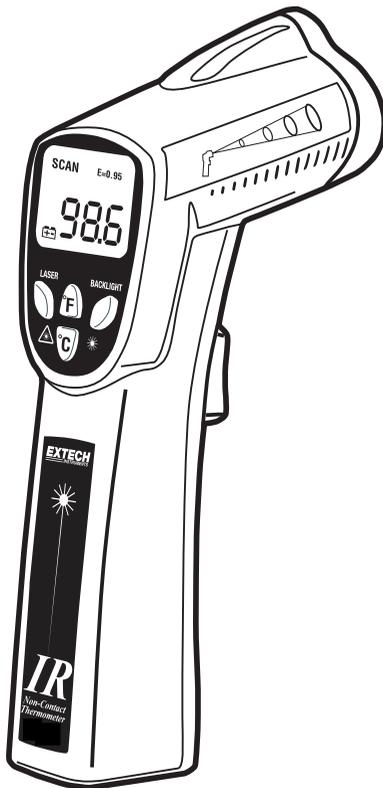


### High Temperature InfraRed Thermometer with Laser Pointer

**MODEL 42530**



Additional User Manual Translations available at [www.extech.com](http://www.extech.com)

## Introduction

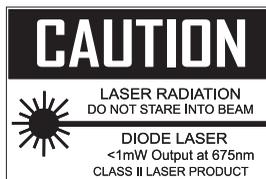
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Congratulations on your purchase of the Model 42530 IR Thermometer. This thermometer makes non-contact (infrared) temperature measurements at the touch of a button. The built-in laser pointer increases target accuracy while the backlit LCD and handy push-buttons combine for convenient, ergonomic operation. Proper use and care of this meter will provide years of reliable service.

## Safety

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- Use extreme caution when the laser pointer beam is on
- Do not point the beam toward anyone's eye or allow the beam to strike the eye from a reflective surface
- Do not use the laser near explosive gases or in other potentially explosive areas



## Specifications

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### Infrared Thermometer Specifications

Range / Resolution	-50 to 538°C (-58 to 1000°F)	0.1°C/F<200 / 1°C/F> 200
Accuracy	± 2% of reading or ± 2°C (4°F) whichever is greater. Note: Accuracy is specified for the following ambient temperature range: 18 to 28°C (64 to 82°F)	
Emissivity	0.95 fixed value	
Field of View	D/S = Approx. 8:1 ratio (D = distance, S = spot)	
Laser power	Less than 1mW	
Spectral response	6 to 14 μm (wavelength)	

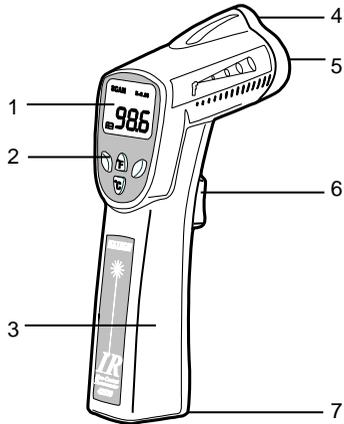
### General Specifications

Display	3½ digit backlit LCD display with function indicators
Display rate	1 second approx.
Operating Temperature	0°C to 50°C (32°F to 122°F)
Operating Humidity	Max. 80% RH
Power Supply	9V battery
Automatic Power Off	Meter shuts off automatically after 7 seconds
Weight	180g / 6.35 oz.
Size	211 x 89 x 38mm (8.3 x 3.5 x 1.5")

## Meter Description

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1. LCD Display
2. Function Buttons
3. Handle Grip
4. Laser Pointer
5. IR Sensor
6. Measurement Trigger
7. Battery Compartment



## Operating Instructions

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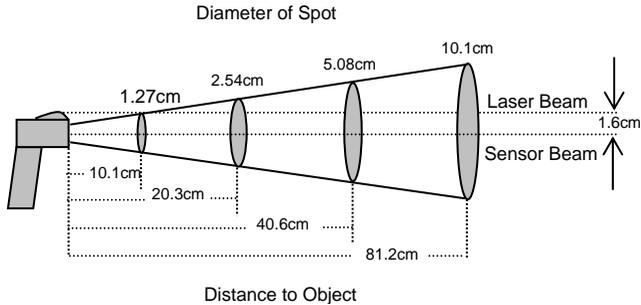
1. Hold the meter by its **Handle Grip** and point it toward the surface to be measured.
2. Pull and hold the red **Trigger** to turn the meter on and begin testing. The display will light if the battery is good. Replace the battery if the display does not light.
3. While measuring, the SCAN display icon will appear in the upper left hand corner of the LCD.
4. While continuing to pull the Trigger:
  - a. Push the red **Laser** button to turn on the laser pointer. When the laser is on the laser icon  will appear on the LCD over the temperature. Aim the red beam approximately a half inch above the point of test (pressing the Laser button again turns the laser off).
  - b. Select the temperature units (°C or °F) using the blue **°C** and **°F** buttons.
  - c. Push the yellow **Backlight** key to turn on the LCD backlighting function.
5. Release the Trigger and the HOLD display icon will appear on the LCD indicating that the reading is being held.
6. The meter will automatically power down after approximately 7 seconds after the trigger is released.

### Overrange Indicator

If the temperature being measured exceeds 538°C (1000°F), the thermometer will emit an audible warning and the OVER icon will be displayed on the LCD.

## Field of View

The meter's field of view is 8:1, meaning that if the meter is 20.3cm from the target, the diameter of the object under test must be at least 2.54cm. Other distances are shown below in the field of view diagram. Refer to the chart printed on the meter for more information.



## Measurement Notes

1. The object under test should be larger than the spot (target) size calculated by the field of view diagram (see diagram on previous page or on side of the meter).
2. If the surface of the object under test is covered with frost, oil, grime, etc., clean before taking measurements.
3. If an object's surface is highly reflective apply masking tape or flat black paint before measuring.
4. The meter may not make accurate measurements through transparent surfaces such as glass.
5. Steam, dust, smoke, etc. can obscure accurate measurements.
6. The meter compensates for deviations in ambient temperature. It can, however, take up to 30 minutes for the meter to adjust to extremely wide ambient temperature changes.
7. To find a hot spot, aim the meter outside the area of interest then scan across (in an up and down motion) until the hot spot is located.

## Battery Replacement

When the low battery symbol  appears on the LCD, replace the meter's 9V battery. The battery compartment is located on the bottom of the meter's handle. Open the compartment by sliding the battery compartment cover off in the direction of the arrow. Replace battery and re-install the battery compartment cover.



Never dispose of used batteries or rechargeable batteries in household waste.

As consumers, users are legally required to take used batteries to appropriate collection sites, the retail store where the batteries were purchased, or wherever batteries are sold.

**Disposal:** Do not dispose of this instrument in household waste. The user is obligated to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment.

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