EXTECH INSTRUMENTS
A FLIR COMPANY

42509 IR Thermometer with Color Alert

NEW — Fastest and Easiest to use

Programmable alarm with fast two-color display and audible alarm

Features:

- Great for processes that require temperature control and monitoring
- Fast, accurate measurements at 12" where the two lasers converge with 12:1 field of view
- Measures up to 950°F (510°C)
- Blue backlit dual LCD display changes to Red when reading exceeds High or Low set points
- Exclusive 150 millisecond instantaneous response for capturing spikes in temperature
- Max mode captures and holds rapidly changing temperatures
- Lock function for continuous readings
- Adjustable emissivity increases measurement accuracy for different surfaces

- Adjustable High/Low set points with audible alarm alerts user when temperature exceeds the programmed set points
- Double molded housing
- Complete with case and 9V battery

Blue backlight: within temperature range

Red backlight plus audible alert: exceeds temperature

Specifications		
Function		
Laser Convergence Distance	12" (30.5 cm)	
Range	-4 to 950°F (-20 to 510°C)	
Repeatability	±0.5% or 1.8°F/1°C	
Basic Accuracy	±(1% of rdg + 2°F/1°C)	
Max resolution	0.1°F/C	
Emissivity	0.10 to 1.00 Adjustable	
Field of View (Distance to Target)	12:1	
Dimensions	5.7x4x1.6" (146x104x43mm)	
Weight	5.7oz (163g)	

Ordering

42509 ....12" Distance Dual Laser InfraRed Thermometer
42509-NIST ....42509 with NIST Certificate

42512 Dual Laser IR Thermometer

Fast and accurate measurements to 1832°F (1000°C)

Features:

- Dual laser simplifies distance-to-target ratio—no more calculations!
- Accurate measurements at 30" distance
- Exclusive 150 millisecond instantaneous response for capturing spikes in temperature
- Max mode captures and holds rapidly changing temperatures
- Lock function for continuous readings
- White backlit dual LCD display
- Adjustable emissivity increases measurement accuracy for different surfaces
- Double molded housing

- Adjustable High/Low set points with audible alarm alerts user when temperature exceeds the programmed set points
- Complete with carrying case and 9V battery

30" (76.2cm)
Convergence point 1" (2.54cm) spot

30" Distance IR

Fast response captures hot spots

Specifications		
Function		
Laser Convergence Distance	30" (76.2 cm)	
Range	-58 to 1832°F (-50 to 1000°C)	
Repeatability	±0.5% or 1.8°F/1°C	
Basic Accuracy	±(1% of rdg + 2°F/1°C)	
Max resolution	0.1°F/C	
Emissivity	0.10 to 1.00 Adjustable	
Field of View (Distance to Target)	30:1	
Dimensions	5.7x4x1.6" (146x104x43mm)	
Weight	5.7oz (163g)	

Ordering

42512 ....30" Distance Dual Laser InfraRed Thermometer
42512-NIST ....42512 with NIST Certificate

Extech Instruments: The brand of choice…

42570 High Temperature IR Thermometer

Fast response (100mS) with highest accuracy at point where dual lasers converge plus Type K input and USB interface
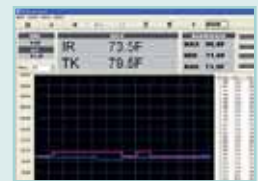
Features:

- High 50:1 distance to target ratio measures smaller surface areas at greater distances
- Dual Laser Targeting indicates ideal measuring distance when two laser points converge to 1" target spot
- Fast 0.10 second response time
- Lock function for continuous measurements
- Stores up to 100 readings
- White backlit LCD with bargraph
- MAX/MIN/AVG/DIF functions

- Adjustable emissivity
- Adjustable High/Low set points with audible alarm
- Tripod mounting feature
- Complete with Type K bead wire probe (-22 to 572°F/ -30 to 300°C), USB cable and PC software, tripod, 9V battery and case

(See pages 42 and 80 for Type K Thermocouple probes)

Fast, easy-to-use, dual laser pointer converge at 50" distance from target providing precise reading without the guesswork.

Type K input

PC software included

Function	
Laser Convergence Distance	50" (127cm)
IR Temperature Range	-58 to 3992°F (-50 to 2200°C)
Repeatability	±0.5% or 1.8°F/1°C
Basic Accuracy	±(1% of rdg + 2°F/1°C)
Max resolution	0.1°F/°C
Emissivity	0.10 to 1.00 Adjustable
Field of View (Distance to Target)	50:1
Type K Range	-58 to 2498°F (-50 to 1370°C)
Dimensions/ Weight	8x6.1x2" (204x155x52mm)/ 11.3oz (320g)

Specifications

Ordering

42570..................50" Distance Dual Laser InfraRed Thermometer
42570-NISTL* ....42570 with NIST Certificate
Limited NIST for Certificate of Traceability from -4 to 1500°F (-20 to 815°C).

42560 IR Thermometer with Wireless PC Interface

Wireless USB interface transmits temperature data to a PC

Features:

- Place meter on the Base to transmit wirelessly continuous readings to the Remote Receiver connected to a PC via USB cable
- High 30:1 distance to target ratio
- Built-in laser pointer
- Lock function for continuous measurements
- Stores up to 20 readings
- Type K temperature function
- MAX/MIN/AVG/DIF functions
- Manual/Automatic emissivity
- High/Low set points with audible alarms

- Data Hold, Auto power off with disable function, low battery indication, 1mV/°F analog output
- Tripod mounting feature
- Complete with Transmitter Base, Remote Receiver with USB cable, Type K bead wire probe (-22 to 572°F/-30 to 300°C), tripod, analog output cable, PC software, 9V battery, AC adaptor, and hard case

See p. 80 for additional Type K Thermocouple probes (sold separately)

WIRELESS Transmitter

Continuous wireless data transfer to the PC using the receiver and software (included). Meter is mounted on a tripod for applications that requires an on-going temperature monitoring of a specific area when meter is set on lock measuring position.

Type K input

FC

Function	
IR Range	-58 to 1922°F (-50 to 1050°C)
Type K Range	-58 to 2498°F (-50 to 1370°C)
Repeatability	±0.5% or ±1.8°F/1°C
Basic Accuracy	IR: ±2% or ±4°F/2°C ; Type K: ±1.5% ±5°F/3°C
Max. Resolution	0.1°F/°C
Emissivity	0.1 to 1.00 Adjustable
Field of View (Distance to Target)	30:1
Power	9V battery; AC adaptor for Base
Dimensions/Weight	3.9x2.2x9" (100x56x230mm)/ 10.2oz (290g)

Specifications

Ordering

42560...............IR Thermometer w/Wireless PC Interface (918MHz)
42560-NIST.....42560 with NIST Certificate
42560-E ....IR Thermometer w/Wireless PC Interface (433MHz)
42560-E-NIST .42560-E with NIST Certificate
TR100..............Spare Tripod

(NOTE: USA, Mexico, and Canada use 918MHz model and majority of other countries use 433MHz model)

...trusted by the professionals.

InfraRed Thermometers

Extech's range of High Temperature IR Thermometers include models with alarms, Type K inputs or Datalogging and printing capabilities.

Featuring Model 42545

▶ High Temperature

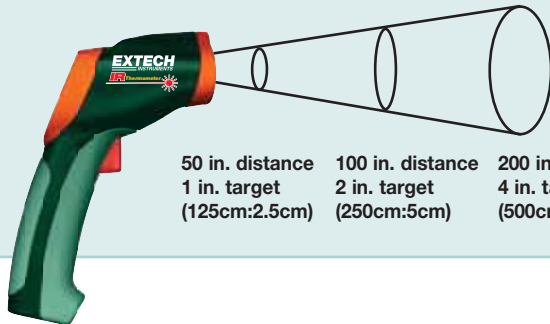**-58 to 1832°F (-50 to 1000°C) for demanding applications**

▶ 50:1 Distance to Target

Measures small areas from greater distances

▶ Laser Pointer

Identifies target area and improves aim

50:1 field of view

50 in. distance	100 in. distance	200 in. distance
1 in. target	2 in. target	4 in. target
(125cm:2.5cm)	(250cm:5cm)	(500cm:10cm)

3 WARRANTY YEARS

All models include carrying case (either soft or hard) and 3 year warranty

Order Meter with NIST Certificate*

All Extech meters come factory calibrated. For an additional charge, Extech will supply your meter with a Certificate of Calibration Traceable to N.I.S.T. with Data at multiple points. **To order meter with NIST:**

42515-NIST
42540-NIST
42545-NIST

*Only products listed are available with NIST Certificate. Meter must be ordered with NIST Certificate at time of purchase.

Specifications

Model	
Range	
Basic Accuracy	
Repeatability	
Max. Resolution	
Emissivity	
Field of View (Distance to Target)	
Dimensions	
Weight	
CE	
Warranty	

Extech Instruments: The brand of choice…

Type K input for
contact measurements

42515 1472°F (800°C), 13:1, IR Thermometer Type K Input, Memory

Automatic Emissivity Adjustment allows accurate measurement of virtually any surface

✓ Wide temperature range for IR temperature and type K thermocouple measurements
✓ Automatic emissivity adjustment (for temperatures 212°F or higher)
✓ Memory stores up to 20 readings
✓ Adjustable high/low visual and audible alarm
✓ MAX/MIN/AVG/DIF features display highest, lowest, average, and MAX minus MIN values
• Large LCD display with bright backlight
• Built-in laser pointer improves aim
• Data Hold, Auto power off, and Low battery indication
• Complete with 9V battery, type K bead wire probe (-22 to 572°F/-30 to 300°C), and soft case
See pages 42 and 80 to order other Type K probes

42540 1400°F (760°C), 16:1, with Alarm, IR Thermometer

16:1 distance to target ratio, rugged thermometer

✓ High Temperature range from -58° to 1400°F (-50 to 760°C)
✓ 16 to 1 distance to target ratio
✓ Adjustable high/low alarm alerts user visually and audibly when temperature exceeds programmed limits
✓ Adjustable emissivity for better accuracy on different surfaces
✓ MIN/MAX/AVG/DIF features display highest, lowest, average, and MAX minus MIN values
• Large backlit display
• Laser pointer identifies target area
• Automatic Data Hold
• Auto power off
• Complete with 9V battery and hard carrying case

42545 1832°F (1000°C), 50:1, with Alarm, IR Thermometer

High 50:1 Field of View

50:1 distance to target ratio

✓ Highest 50 to 1 distance to target ratio measures smaller surface areas at greater distances
✓ Widest Temperature range from -58 to 1832°F (-50 to 1000°C)
✓ Adjustable high/low alarm alerts user visually and audibly when temperature exceeds programmed limits
✓ Adjustable emissivity for better accuracy on different surfaces
✓ MIN/MAX/AVG/DIF features display highest, lowest, average, and MAX minus MIN values
• Large backlit display
• Laser pointer identifies target area
• Automatic Data Hold
• Auto power off
• Complete with 9V battery and hard carrying case

42515	42540	42545
-58 to 1472°F (InfraRed); -58 to 2498°F (Type K)	-58 to 1400°F	-58 to 1832°F
-50 to 800°C (InfraRed); -50 to 1370°C (Type K)	-50 to 760°C	-50 to 1000°C
(IR) ±2%rdg or 4°F (2°C); ±1.5%rdg + 2°F/1°C (Type K)	±2%rdg or 4°F (2°C) whichever is greater<932°F (500°C); ±(2.5%rdg + 5°)> 932°F (500°C)	2%rdg + 4°F/2°C<932°F (500°C); 3% + 9°F/4°C>932°F (500°C)
±0.5% or ±1.8°F/1°C	±0.5% or ±1.8°F/1°C	±0.5% or ±1.8°F/1°C
0.1°F/°C	0.1°F/°C	0.1°F/°C
0.1 to 1.00 Adjustable	0.1 to 1.00 Adjustable	0.1 to 1.00 Adjustable
13:1	16:1	50:1
3.2 x1.6x6.3" (82x42x160mm)	3.9x2.2x9" (100x56x230mm)	3.9x2.2x9" (100x56x230mm)
6.4oz (180g)	10.2oz (290g)	10.2oz (290g)
Yes	Yes	Yes
✓3 years	✓3 years	✓3 years

EXTECH INSTRUMENTS
A FLIR COMPANY

InfraRed Thermometers

Extech's non-contact InfraRed thermometers point and measure technology provide fast, easy and accurate readings for most surface temperature measurements.

Featuring Model *42510A*

▶ *Programmable Alarm*

Adjustable High/Low set points alert user when temperature exceeds set point

▶ *Adjustable Emissivity*

For better accuracy on different surfaces

▶ *Laser Pointer*

Identifies target area and improves aim

▶ *High Accuracy*

With ±1% rdg basic accuracy and 0.1° resolution to 199.9°

Mini size

IR100 446°F (230°C), 1:1, Mini IR Thermometer

Mini size design for the ultimate convenience and portability

- Measures non-contact surface temperature up to 446°F (230°C)
- Economical mini size design for convenience
- Automatic Data Hold when measure button is released
- Max Hold or Min Hold
- Lock feature for continuous scanning
- Fixed 0.95 emissivity covers 90% of surface applications
- Auto power off
- Complete with CR2032 3V battery

Applications

Choose the best InfraRed Thermometer to fit your application needs by selecting the proper measurement range, field of view, resolution, and accuracy. Applications include Refrigeration, Boiler, Pavement, Printer/Copier, HVAC/R, Automotive, and Industrial Troubleshooting.

Order Meter with NIST Certificate*

All Extech meters come factory calibrated. For an additional charge, Extech will supply your meter with a Certificate of Calibration Traceable to N.I.S.T. with Data at multiple points. **To order meter with NIST:**
42500-NIST
42510A-NIST

*Only products listed are available with NIST Certificate. Meter must be ordered with NIST Certificate at time of purchase.

Specifications

Model	IR100
IR Temperature (Non-contact)	-31 to 446°F
	-35 to 230°C
Basic Accuracy	±(2.0%rdg) or ±4°F/2°C
Max. Resolution	0.1°
Emissivity	0.95 fixed
Field of view (Distance to Target)	1:1
Dimensions	3x1.6x0.7" (75x40x18mm)
Weight	1.5oz (43g)
CE	Yes
Warranty	1 year

Extech Instruments: The brand of choice…

Palm size

Compact Handheld size

Compact Handheld size

IR201 518°F (270°C), 6:1, Pocket Laser IR Thermometer

Handy troubleshooting thermometer with laser pointer

- Measures non-contact surface temperature up to 518°F (270°C)
- Economical small pocket size design for convenience
- Built-in laser pointer identifies target area
- Data Hold and Max Hold
- Auto power off
- Fixed 0.95 emissivity covers 90% of surface applications
- Complete with two AAA batteries and pouch case

42500 500°F (260°C), 6:1, Compact Laser IR Thermometer

Compact thermometer measures up to 500°F (260°C)

- Built-in laser pointer identifies target area
- Backlighting
- Automatic Data Hold when trigger released
- Fixed 0.95 emissivity covers 90% of surface applications
- Auto power off
- Complete with 9V battery and pouch case

42510A 1200°F (650°C), 12:1, Compact Laser IR Thermometer

Compact thermometer with high accuracy

- ✓ Adjustable high/low visual and audible alarm
- ✓ Adjustable emissivity for better accuracy on different surfaces
- Measures temperature from -58 to 1200°F (-50 to 650°C) with 0.1° resolution up to 199.9°
- Built-in laser pointer identifies target area
- Backlighting
- Overrange indicator
- Automatic Data Hold when trigger released
- MAX/MIN features display highest and lowest values
- Auto power off
- Complete with 9V battery and pouch case

IR201	42500	42510A
-4 to 518°F	-4 to 500°F	-58 to 1200°F
-20 to 270°C	-20 to 260°C	-50 to 650°C
±(2.5%rdg±3°F/2°C)	±2% of reading or ±4°F/±2°C (whichever is greater)	±(1% of reading + 2°F/1°C)
1°F/°C	1°F/°C	0.1°F/°C; 1°F/°C
0.95 fixed	0.95 fixed	0.1 to 1.00 Adjustable
6:1	6:1	12:1
3.7x2x1" (94x51x25mm)	3.2x1.7x6.7" (82x44x170mm)	3.2x1.6x6.3" (82x42x160mm)
2.7oz (76g)	4.9oz (140g)	6.4oz (180g)
Yes	Yes	Yes
1 year	✓3 years	✓3 years

...trusted by the professionals.