

**ERICKHILL ROOK600C**

## ERICKHILL Infrared Thermometer Gun User Manual

Model: ROOK600C

### 1. INTRODUCTION

The ERICKHILL Infrared Thermometer Gun is a non-contact temperature measurement device designed for various applications, including cooking, BBQ, HVAC, engine diagnostics, and pool temperature monitoring. It provides rapid and accurate temperature readings from -58°F to 1112°F (-50°C to 600°C) with a  $\pm 1.5\%$  accuracy. Featuring adjustable emissivity and a 12:1 distance-to-spot ratio, this thermometer allows for precise measurements from a safe distance. Its user-friendly design includes a clear backlit LCD, laser targeting, and automatic shut-off for power saving.



Figure 1.1: ERICKHILL Infrared Thermometer Gun and included AAA batteries.

## 2. SAFETY INFORMATION

**WARNING:** This device is NOT intended for measuring human or animal body temperature. It is designed for industrial and household surface temperature measurements only.



Figure 2.1: The thermometer is not for human temperature measurement.

- Do not point the laser directly into eyes or at reflective surfaces.
- Keep the device away from children.
- Do not use the device in explosive gas, vapor, or dust environments.
- Avoid exposing the device to extreme temperatures or humidity.

## 3. PRODUCT OVERVIEW

### 3.1 Package Contents

- 1 x ERICKHILL Infrared Thermometer
- 1 x User Manual
- 2 x AAA Batteries

### 3.2 Device Components

# LCD DISPLAY

Illuminating Darkness with the Clear LCD Display



Figure 3.1: LCD Display and Component Overview.

- **Measurement Trigger:** Press to activate and take readings.
- **LCD Display:** Shows temperature readings, mode indicators, and battery status.
- **Laser Pointer:** Helps pinpoint the measurement target.
- **°C/°F Button:** Toggles between Celsius and Fahrenheit units.
- **MODE Button:** Used to adjust emissivity.
- **Up/Down Buttons:** Adjust emissivity value in MODE.

## 4. SETUP

### 4.1 Battery Installation

The ERICKHILL Infrared Thermometer requires two AAA batteries (included). To install or replace batteries:

1. Locate the battery compartment on the handle of the device.
2. Open the battery compartment cover.
3. Insert the two AAA batteries, ensuring correct polarity (+/-).
4. Close the battery compartment cover securely.



Figure 4.1: Battery installation.

## 5. OPERATING INSTRUCTIONS

### 5.1 Basic Measurement

To take a temperature reading:

1. Point the thermometer at the target surface.
2. Press and hold the measurement trigger. The laser pointer will activate (if enabled) to indicate the measurement spot.
3. The temperature reading will appear on the LCD display within 0.5 seconds.
4. Release the trigger to hold the reading on the display. The device will automatically shut off after 12 seconds of inactivity.

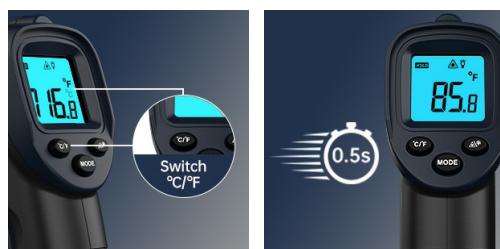


Figure 5.1: Fast response and data hold features.

### 5.2 Adjustable Emissivity

Emissivity is the ability of a material to emit thermal energy. Different materials have different emissivity values. Adjusting the emissivity setting (EMS) on the thermometer ensures more accurate readings for various surfaces. The default value is 0.95, suitable for most organic materials and painted surfaces. You can adjust it from 0.1 to 1.0.

1. With the device on, press the 'MODE' button. The 'EMS' indicator will appear on the display.
2. Use the Up/Down buttons to adjust the emissivity value.
3. Press the 'MODE' button again to confirm the setting or wait for the device to return to measurement mode automatically.



**EMISSIVITY TABLE**

Material	Emissivity	Material	Emissivity
Aluminum	0.30	Iron	0.70
Asbestos	0.95	Lead	0.50
Asphalt	0.95	Limestone	0.98
Basalt	0.70	Oil	0.94
Brass	0.50	Paint	0.93
Brick	0.90	Paper	0.95
Carbon	0.85	Plastic	0.95
Ceramic	0.95	Rubber	0.95
Concrete	0.95	Sand	0.90
Copper	0.95	Snow	0.90
Dirt	0.94	Steel	0.80
Frozen food	0.90	Textiles	0.94
Hot food	0.93	Water	0.93
Glass (plate)	0.85	Wood	0.94
Ice	0.98	/	/

**ADJUSTABLE EMISSIVITY**

Set corresponding EMS for different objects to make the measurement more accurate(0.1-1.0)

Figure 5.2: Emissivity Table for common materials.

### 5.3 Unit Switching (°C/°F)

To switch between Celsius (°C) and Fahrenheit (°F):

- Press the '°C/°F' button located below the display. The unit will change instantly.



Figure 5.3: °C/F unit switch button.

## 5.4 Backlight and Laser Control

The device features a backlight for visibility in low-light conditions and a laser pointer for precise targeting.

- To toggle the backlight, press the button with the light bulb icon.
- To toggle the laser pointer, press the button with the laser icon.



Figure 5.4: Backlight and Laser control buttons.

## 5.5 Auto Shut-off

To conserve battery life, the thermometer will automatically shut down after 12 seconds of inactivity.

## 6. APPLICATIONS

The ERICKHILL Infrared Thermometer Gun is suitable for a wide range of non-contact temperature measurement tasks, including but not limited to:

- **Cooking and Baking:** Checking temperatures of ovens, grills, griddles, pizza stones, and cooking surfaces.
- **HVAC:** Monitoring air conditioning vents, heating systems, and insulation efficiency.
- **Automotive:** Measuring engine components, tires, and brake temperatures.
- **Home Maintenance:** Identifying hot or cold spots in walls, windows, and pipes.
- **Pool and Spa:** Checking water temperatures.
- **Industrial Use:** Monitoring machinery, electrical panels, and manufacturing processes.

# WIDE APPLICATION

More measurement types are waiting for you to discover.

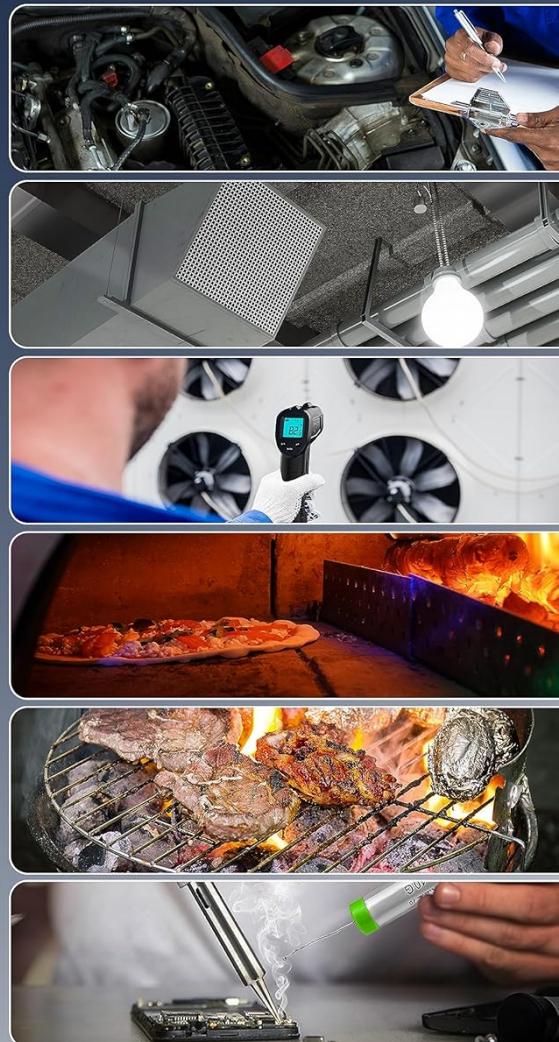


Figure 6.1: Wide range of applications for the thermometer.

## 7. MAINTENANCE

To ensure the longevity and accuracy of your ERICKHILL Infrared Thermometer:

- **Cleaning:** Wipe the device clean with a soft, damp cloth. Do not use abrasive cleaners or immerse the device in water.
- **Storage:** Store the device in a cool, dry place when not in use. Remove batteries if storing for extended periods to prevent leakage.
- **Lens Care:** The infrared lens is the most delicate part. Clean it gently with a soft cloth or cotton swab and rubbing alcohol if necessary.

## 8. TROUBLESHOOTING

- **Device does not turn on:**

- Check if the batteries are installed correctly with the correct polarity.
- Replace with new AAA batteries.

- **Inaccurate readings:**

- Ensure the emissivity setting is appropriate for the material being measured (refer to Section 5.2).
- Check that the lens is clean and free from dust or debris.
- Ensure the distance-to-spot ratio is respected; avoid measuring objects too close or too far.
- Avoid measuring through transparent surfaces like glass, as they can lead to inaccurate readings.

- **Laser not working:**

- Ensure the laser function is enabled (refer to Section 5.4).
- Check battery level.

## 9. SPECIFICATIONS

Feature	Specification
Temperature Range	-58°F~1112°F (-50°C~600°C)
Accuracy	±1.5%
Response Time	0.5 seconds
Distance-to-Spot Ratio (D:S)	12:1
Emissivity	Adjustable (0.1-1.0), default 0.95
Power Source	2 x AAA Batteries (included)
Auto Shut-off	12 seconds of inactivity
Display Type	Digital LCD with Backlight
Special Feature	Non-Contact Measurement, Laser Pointer
Product Dimensions	8.11 x 7.76 x 1.81 inches
Item Weight	6 ounces
Model Number	ROOK600C

## 10. WARRANTY AND SUPPORT

ERICKHILL provides a 3-year warranty and lifetime technical support for each product. If you have any questions or require

assistance with your ERICKHILL Infrared Thermometer Gun, please do not hesitate to contact ERICKHILL customer service.

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## Related Documents

 <p>ERICKHILL IR THERMOMETER ROOK 400/600 SP USER MANUAL</p> <p>CE US RoHS FCC FDA</p> <p>Customer Service: support@erick-hill.com</p>	<p><a href="#"><u>ERICKHILL ROOK 400/600 SP IR Thermometer User Manual</u></a></p> <p>User manual for the ERICKHILL ROOK 400 SP and ROOK 600 SP infrared thermometers. Provides instructions on operation, features, safety, and technical specifications.</p>
 <p>ERICKHILL EMF METER ER02 User Manual</p> <p>CE US RoHS FCC</p> <p>Customer Service: support@erick-hill.com</p>	<p><a href="#"><u>ERICKHILL ER02 EMF Meter User Manual</u></a></p> <p>Explore the capabilities of the ERICKHILL ER02 EMF Meter with this comprehensive user manual. Learn about its 3-in-1 functionality for measuring electric, magnetic, and radio frequency fields, including operation, specifications, and safety guidelines.</p>