

UNI-T UT300A

UNI-T UT300A Digital Infrared Thermometer User Manual

Model: UT300A

INTRODUCTION

This manual provides detailed instructions for the safe and effective operation of your UNI-T UT300A Digital Infrared Thermometer. Please read this manual thoroughly before using the device and retain it for future reference. The UT300A is designed for non-contact temperature measurement in various applications.

SAFETY INFORMATION

WARNING:

- Do not point the laser directly at eyes or indirectly off reflective surfaces.
- Do not use the thermometer near explosive gas, steam, or dust.
- Avoid exposing the device to extreme temperatures, humidity, or direct sunlight.
- Do not attempt to disassemble or modify the thermometer. Refer servicing to qualified personnel.
- Keep the device out of reach of children.

This device is intended for industrial and scientific use, not for medical applications.

PRODUCT OVERVIEW

The UNI-T UT300A is a compact and easy-to-use digital infrared thermometer. Key components include:

- **Infrared Sensor:** Detects infrared radiation to measure temperature.
- **Laser Pointer:** Helps aim at the target measurement area.
- **LCD Display:** Shows temperature readings and other indicators.
- **Measurement Trigger:** Activates the measurement.
- **Battery Compartment:** Houses the power source.



Image 1: Front view of the UNI-T UT300A Digital Infrared Thermometer, showing the display, trigger, and laser aperture.

SETUP

Battery Installation

1. Locate the battery compartment cover, typically on the handle.
2. Open the cover by sliding or unlatching it.
3. Insert the required batteries (e.g., 9V battery) according to the polarity indicators (+/-).
4. Close the battery compartment cover securely.

Note: Batteries are required for operation. Ensure correct polarity to prevent damage.

OPERATING INSTRUCTIONS

Taking a Measurement

1. Point the thermometer at the target object. Ensure the target is within the field of view.
2. Press and hold the measurement trigger. The laser pointer will activate to indicate the measurement area.
3. The temperature reading will appear on the LCD display.
4. Release the trigger to hold the reading on the display (Data Hold function).

Distance to Spot Ratio (D:S)

The UT300A has a D:S ratio of 10:1. This means that at a distance of 10 units from the target, the measurement spot diameter will be 1 unit. For accurate readings, ensure the target area is larger than the measurement spot size.

Backlight Function

The display backlight can be activated to improve visibility in low-light conditions. This function is typically

controlled by a dedicated button or automatically when the trigger is pressed.

Data Hold

After releasing the measurement trigger, the last measured temperature will remain on the display for a short period, allowing you to record the reading. This is the Data Hold feature.

MAINTENANCE

Cleaning

- Use a soft, damp cloth to clean the device casing. Do not use abrasive cleaners or solvents.
- For the lens, use a soft cloth or cotton swab with a small amount of isopropyl alcohol.
- Ensure the device is completely dry before storage or next use.

Storage

- Store the thermometer in a cool, dry place, away from direct sunlight and extreme temperatures.
- If storing for an extended period, remove the batteries to prevent leakage.

TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|------------------------------------|---|--|
| No display/Device does not turn on | Dead or incorrectly installed batteries | Replace batteries, ensuring correct polarity. |
| Inaccurate readings | Target too small or too far | Ensure target is larger than spot size and within D:S ratio. |
| | Lens dirty | Clean the lens carefully. |
| | Ambient temperature changes | Allow the thermometer to stabilize in the new environment. |
| Laser not working | Laser function disabled or malfunction | Check if there's a laser enable/disable option (if applicable). If not, contact support. |

SPECIFICATIONS

| Feature | Detail |
|------------------------------|-------------------------------------|
| Model | UT300A |
| Temperature Range | -20°C to 400°C (-4°F to 752°F) |
| Distance to Spot Ratio (D:S) | 10:1 |
| Display Type | Digital |
| Special Features | Data Hold, Backlight, High Accuracy |
| Power Source | Battery Powered |
| Dimensions | 25 x 23 x 25 cm |

| Feature | Detail |
|--------------|----------------|
| Weight | 1.25 Kilograms |
| Manufacturer | UNI-T |

WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the official UNI-T website or contact your local distributor. Keep your purchase receipt as proof of purchase. Extended warranty options may be available from third-party providers, as detailed at the point of purchase.