UNI-T UT306A Mini Infrared Thermometer User Manual

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UT306A
Mini Infrared Thermometer User Manual

Contents

Introduction

UT306A is a mini infrared thermometer, that is able to determine the temperature of an object by measuring the radiated infrared energy from its surface.

Safety information

Warnings:

To avoid injury and damage, please read the following information before use.

- Do not point laser directly at persons or animals or indirectly off reflective surfaces.
- Do not look directly into the laser with optical tools (for example, telescopes, microscopes). Optical tools can focus the laser and be dangerous to the eyes.
- If a low power indicator flashes on the screen, please replace the battery.
- Before using the product, please check it, if damaged, the surface cracks or the lack of plastic parts, do not use
- See emissivity information for actual temperature. Reflective objects result in lower than actual temperature measurements. These objects pose a burn hazard.
- Do not use the device if explosive gas, steam, moist surrounding.
- To ensure accuracy, place the device in the current environment for over 30 mins.
- Avoid staying beside objects with high temperatures for a long time.

Specifications

Range	-35 t- 300 t (-31 F- 572F)
Accuracy Calibrated ambie nt temperature: 21°C-25 C(70 F- 77F)	..?-0 t:±2.0 °C or ±2%of reading,whichever greater <0 t:±(2.0 t+0.1 t/ t) .-32 F:±4.0F or ±2%of reading,whichever greater <32 F:±(4.0F+0.1FPF)
Temperature coefficient	0.1 t/t(0.1F/F) or ±0.1% of reading per degree,whichever greater
Optical resolution	6:1(calculated when energy is 90%)
Emissivity	0.95
Response time	250ms(95% of reading)
Spectral response	8um – 14um
Display resolution	0.1 t(0.1 F)
Repeatability	±1.0 t(2.0 F) or ±0.1% of reading,whichever greater
Laser	IEC60825-1:2014 CLASS II, A=630nm-670nm, <1mW
Battery type	AAA 1.5V*3
Battery life	?:-20H(Work continuously with laser&backlight on)
Dimension	120mm*53mm*28mm
Weight	120g
Working temperature	0 °C- 50 t (32 F-104 F)
Storage temperature	-20°C- 60 t (-4 F-140 F)
Working humidity	<Rh90% (non-condensation)
Working altitude	—⁻.2000 meters
Storage altitude	12000m
Drop test	1 m

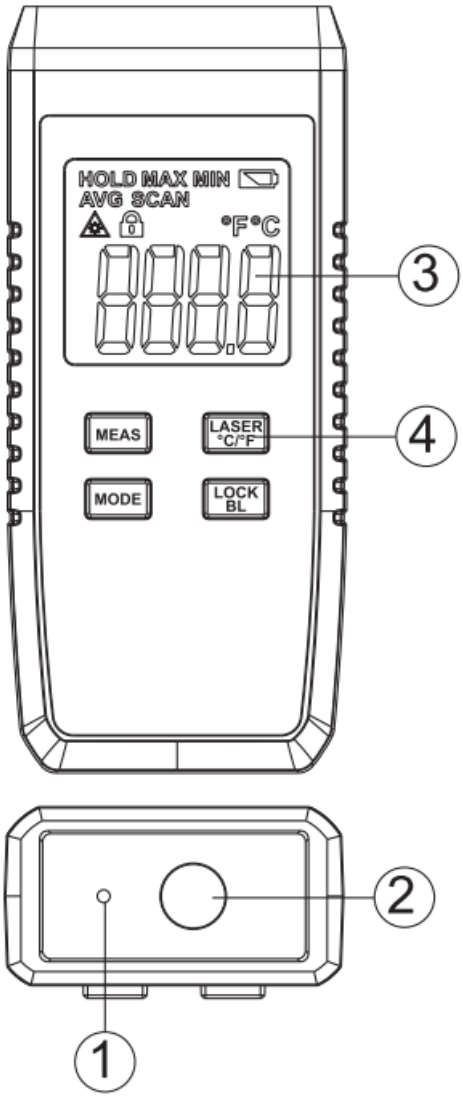
Safety standard

CE: EN61326-1: 2013 EN61326-2-2: 2013
Laser safety standard: EN60825-1: 2014

Product description

Structure

1. **Laser emission spot**
2. **The infrared signal receiving terminal**
3. **Display screen**
4. **Buttons**



Features

- **Laser aiming**
- **Backlight**
- **Auto measurement**
- **MAX/MIN/AVG temperature measurement**

- **Selectable temperature units**
- **Low power indication**
- **Data hold**
- **Auto power off**
- **Auto recording**

Buttons

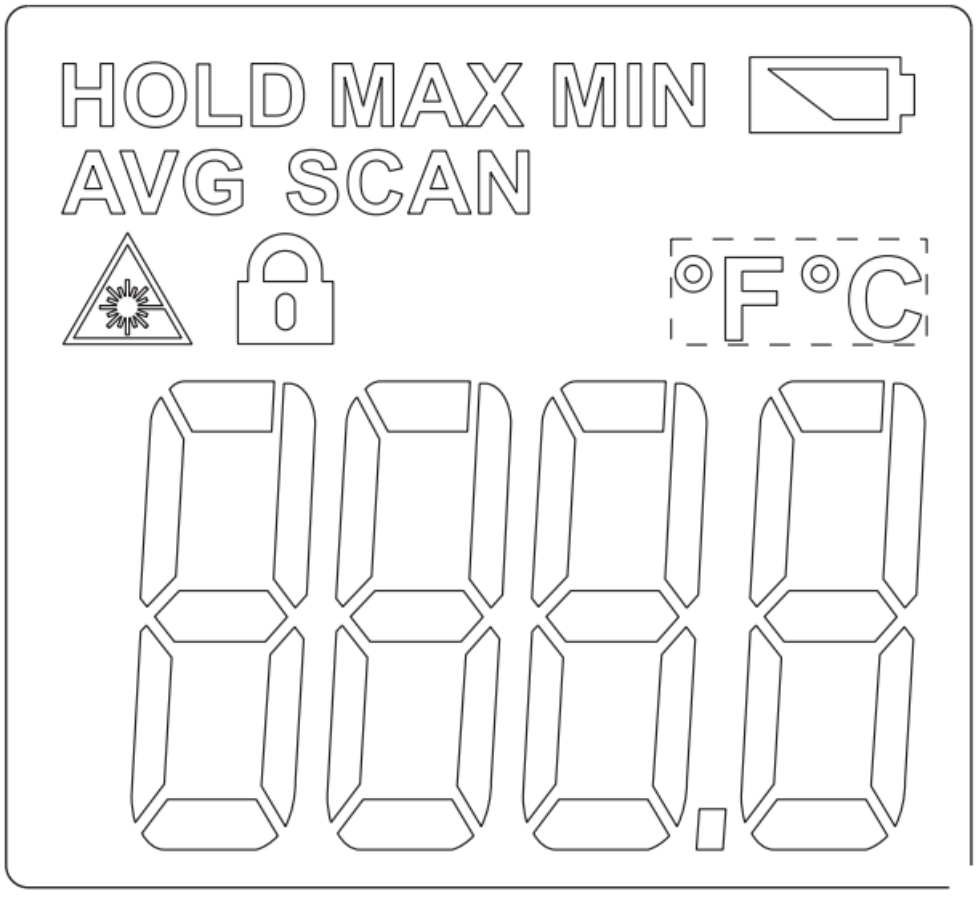
: Power ON&Measurement

: Laser ON/OFF or Temperature unit switch

: Select MAX/MIN/AVG or real-time measurement

: Measurement lock or backlight ON/OFF

SYMBOLS



HOLD	Data hold
MAX	Maximum value
MIN	Minimum value
	Low power
AVG	Average value
SCAN	Scan measurement
	Laser ON
	Auto measurement
ºFºC	Temperature unit
	Reading

Operation instructions

Power on

Short press I 

to switch on the device and record from the last shutdown is displayed.

Temperature measurement

Press I 

and hold thermometer start scanning, SCAN symbol flashes on the screen. Laser is for aiming object being measured. Release 

button to stop measurement. HOLD symbol appears while SCAN symbol disappears and the laser is off. The result is displayed on the screen.

Auto Measurement

After turning on the device, short press 

the button to activate the measurement lock function.  the symbol appears on the screen. The thermometer will conduct auto and continuous measurement without any operation. Short press LOCK/BL again to unlock the auto measurement.  the symbol disappears and returns to HOLD mode.

Auto power off
The thermometer will automatically power off if without operation for 8 seconds.

Laser ON/OFF

Turn on the thermometer, short press 

to switch ON/OFF the laser. When the laser is ON,  the

symbol appears.

Temperature unit

Turn on the thermometer, long press LASER °C/°F to switch the temperature unit.

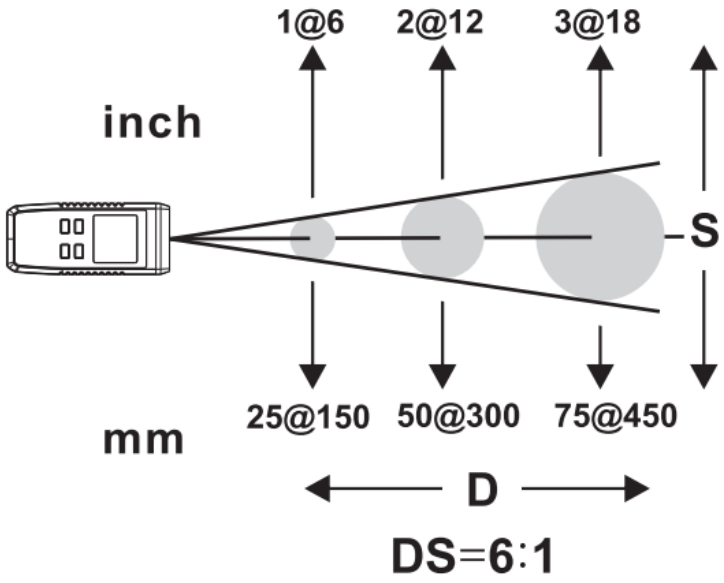
Backlight

Turn on the thermometer, long press LOCK BL to turn ON/OFF the backlight.

Measurement modes

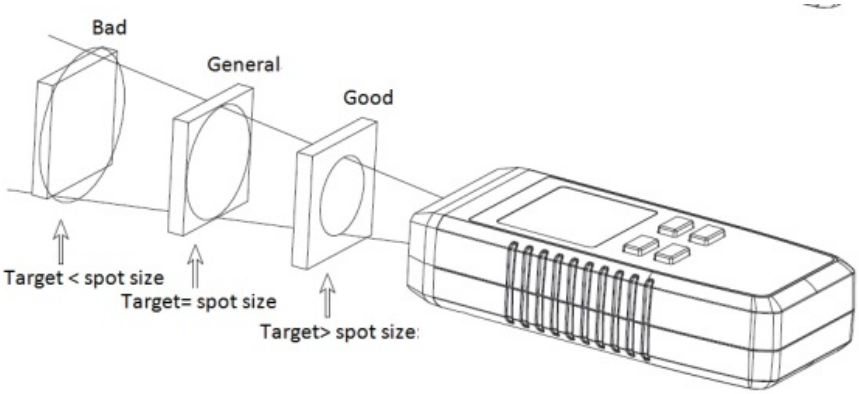
Turn on the thermometer, short press MODE to cycle switch between MAX, MIN, AVG, real-time measurement modes. Corresponding symbols appear to indicate the current measurement mode. MAX/MIN/AVG symbols disappear when measuring real-time temperature.

Distance and spot size



Field of view
Make sure the target is larger than the spot size.

The smaller the target the closer the measure distance. Suggest distance ≤ (15cm/6 inch).



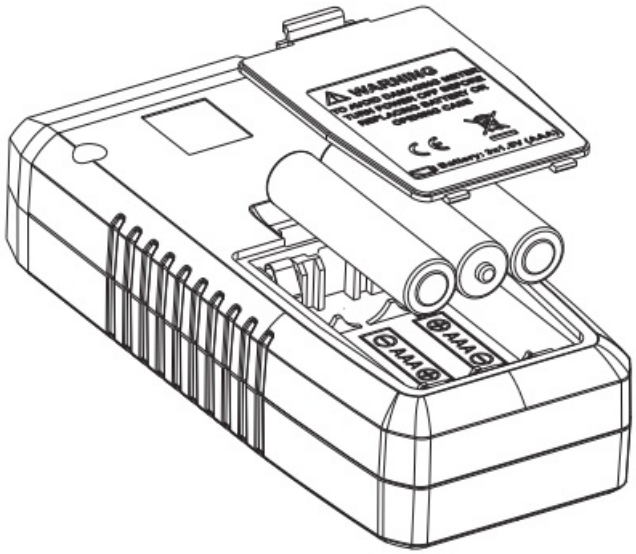
Maintenance

Clean

- Lens cleaning: blow off loose particles using clean compressed Gently brush remaining debris away with a moist cotton cloth.
- Case cleaning: clean the case with a damp cloth and mild soap.

Battery replacement

Replace the battery as the below shown



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Documents / Resources

	**UNI-T UT306A Mini Infrared Thermometer** [pdf] User Manual UT306A, Mini Infrared Thermometer
	**UNI-T UT306A Mini Infrared Thermometer** [pdf] User Manual UT306A, Mini Infrared Thermometer