UNI-T

UT306A
Mini Infrared Thermometer User Manual

I. Introduction

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

II. 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 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 at current environment for over 30 mins.
- Avoid staying beside object with high temperature for long time.

III. Specifications

Range	−35℃~ 300℃ (-31℉~ 572℉)
Accuracy Calibrated ambient temperature: 21℃~25℃(70℉~ 77℉)	≥0℃:±2.0℃ or ±2%of reading,whichever greater <0℃:±(2.0℃+0.1℃/℃) ≥32℉:±4.0℉ or ±2%of reading,whichever greater <32℉:±(4.0℉+0.1℉/℉)
Temperature coefficient	0.1℃/℃(0.1℉/℉) 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℃(0.1℉)
Repeatability	±1.0℃(2.0℉) or ±0.1% of reading,whichever greater
Laser	IEC60825-1:2014 CLASS II, λ=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℃~ 50℃ (32℉~104℉)
Storage temperature	-20℃~ 60℃ (-4℉~140℉)
Working humidity	<Rh90% (non-condensation)
Working altitude	≤2000 meters
Storage altitude	12000m
Drop test	1 m

IV. Safety standard

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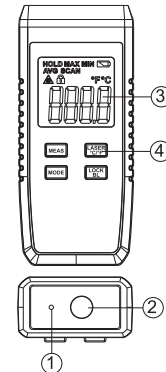Laser safety standard: EN60825-1: 2014

V. Features

- Laser aiming
- Backlight
- Auto measurement
- MAX/MIN/AVG temperature measurement.
- Selectable temperature units
- Low power indication
- Data hold
- Auto power off
- Auto recording
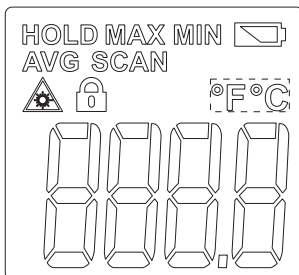
VI. Product description

Structure
1. Laser emission spot
2. Infrared signal receiving terminal
3. Display screen
4. Buttons

Buttons

MEAS : Power ON&Measurement

LASER °C/°F : Laser ON/OFF or Temperature unit switch

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

LOCK BL : 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
°F°C	Temperature unit
8888	Reading

VII. Operation instructions

Power on
Short press **MEAS** to switch on the device and record from last shutdown is displayed.

Temperature measurement
Press **MEAS** and hold, thermometer start scanning, SCAN symbol flashes on the screen. Laser is for aiming object being measured. Release **MEAS** button to stop measurement. HOLD symbol appears while SCAN symbol disappears and laser is off.Result is displayed on the screen.

Auto Measurement
After turn on the device, short press **LOCK BL** button to activate measurement lock function. 🔒 symbol appears on the screen. Thermometer will conduct auto and continuous measurement without any operation. Short press LOCK/BL again to unlock the auto measurement. 🔒 symbol disappears and return 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 **LASER °C/°F** to switch ON/OFF the laser. When laser is ON, ⚠ symbol appears.

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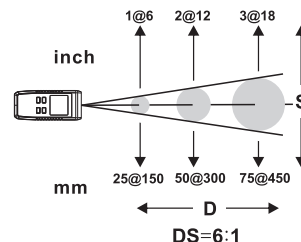Turn on the thermometer, long press **LASER °C/°F** to switch temperature unit.

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.
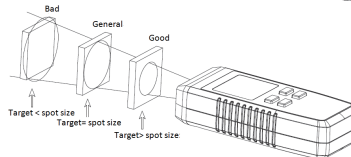
Distance and spot size

inch
1@6 2@12 3@18
S
mm
25@150 50@300 75@450
D
DS=6:1

Field of view
Make sure the target is larger than the spot size.
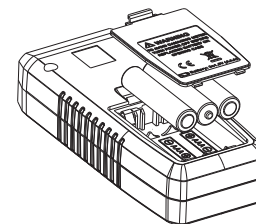The smaller the target the closer measure distance. Suggest distance ≤(15cm/6 inch).

Bad
General
Good
Target < spot size
Target= spot size
Target> spot size

VIII. Maintenance

Clean
● Lens cleaning: blow off lose particles using clean compressed air. 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

说明书菲林做货要求：

序号	项目	内容
1	尺寸	展开尺寸:210*140mm　折后尺寸：140*52.5mm
2	材质	60g书纸
3	颜色	单色双面印刷
4	外观要求	完整清晰、版面整洁，无斑墨、残损、毛边、刀线错位等缺陷。
5	装订方式	无
6	表面处理	无
7	其它	无
版本		REV.1 修改成股份有限公司

DWH 设计	黄荣伟2018.06.25	MODEL 机型：UT306A	Part NO. 旧P/N: 物料编号:新P/N110401106696X
CHK 审核			
APPRO. 批准			

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