GAZELLE®

G9403

Mini Infrared Thermometer User Manual

I. Introduction

G9403 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

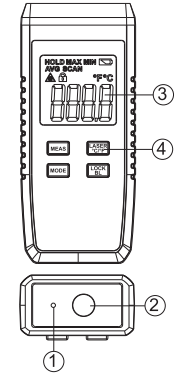
V. Features

- 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

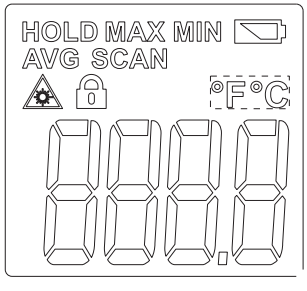
1.Laser emission spot
2.Infrared signal receiving terminal
3.Display screen
4.Buttons



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.

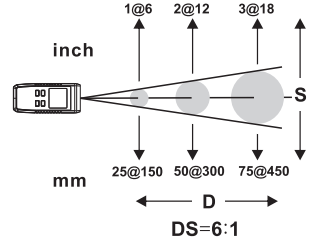
Laser ON/OFF
Turn on the thermometer, short press LASER °C/°F to switch ON/OFF the laser. When laser is ON, symbol appears.

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

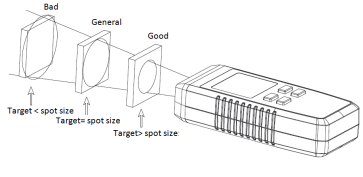
Backlight
Turn on the thermometer, long press LOCK BL to turn ON/OFF the backlight.

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



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).



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