Kimo KIRAY 100 Infrared Thermometer

KIRAY 100
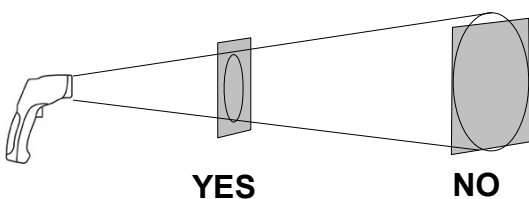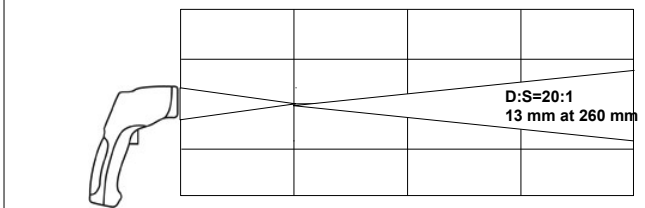## *Infrared thermometer*

New
CE
°F
°C

Infrared thermometer **KIRAY 100** with dual laser sighting is a key tool to diagnose, inspect and check any temperature, with the advantage of using "no-contact" technology. You can safely measure surface temperatures of hot objects, dangerous or difficult to access. Perfect tool to take temperature in a house, a garage, a workshop, an office, a car, a kitchen etc...

■ *Technical features*

Spectral response	8 - 14 µm
Optical	D.S : 20:1 (13 mm at 260 mm)
Temperature range	From -50 to +800°C
Accuracy*	From -50 à +20°C : ±2.5°C
	From +20 to +300°C : ±2% of reading ±2°C
	From +300°C to +800°C : ±2% of reading
Infrared repeatability	From -50 to +20°C : ±1.3°C
	From +20 to +800°C : ±0.5% or ±0.5°C
Display resolution	0.1°C
Response time	150 ms
Emissivity	Adjustable from 0.10 to 1.0 (pre-set at 0.95)
Over range indication	Display indication : « ---- »
Dual laser sighting	Wave length : from 630 nm to 670 nm
	Output < 1mW, Class 2 (II)
Positive or negative temperature indication	Automatic (no indication for a positive temperature)
	(-) sign for a negative temperature
Display	4 digits with LCD backlighted display
Auto-extinction	Automatic after 7 seconds of inactivity
High/low alarm	Flashing signal on display and beep signal with adjustable thresholds
Power supply	Alkaline 9V battery
Autonomy	105 h (inactive laser and backlight)
	20 h (active laser and backlight)
Use temperature	From 0 to +10°C for a short period
	From +11 to +50 °C for a long period
Storage temperature	From -10°C to +60°C
Relative humidity	From 10 to 90%HR in operating mode and > 80%RH in storage
Dimensions	145 x 95 x 40 mm
Weight	180 g (included battery)

*Accuracy for an ambient temperature from 23 to 25°C (with a relative humidity lower than 80% RH)

■ *Distance from the target*

Distance	254	260	508	mm
Diameter	12.7	13	25.4	mm

D:S=20:1
13 mm at 260 mm

YES NO

Make sure that the target is larger than the size of the laser sighting.

■ *Display*
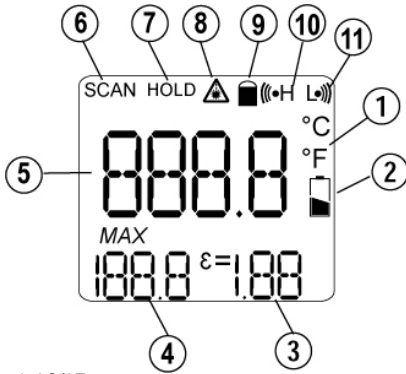
1 – Technical unit °C/°F
2 – Low battery indicator
3 – Emissivity value = 0.95 (factory setting)
4 – Max temperature indicator.
5 – Temperature value
6 – Current measurement indicator
7 – HOLD indicator (fixed measurement)
8 – Laser in operation indicator
9 – Lock indicator (continuous measurement)
10 – High alarm symbol (fixed : activated alarm ;
flashing + beep : alarm thresholds exceeded)
11 – Low alarm symbol (fixed : activated alarm ;
flashing + beep : alarm thresholds exceeded)

■ *KIRAY 100 buttons*

1 – Up button. It allows to increment emissivity and high/low alarm thresholds. This button also allows in measurement mode to activate or deactivate the laser.

2 – Mode button. It allows to navigate through the modes (emissivity, lock, high alarm, low alarm).

3 – Down button. It allows to decrement emissivity and high/low alarm thresholds. This button also allows in measurement mode to activate or deactivate the backlight.

■ *Description*

LCD backlighted display

Up button

Mode button

IR sensor (infrared)

Down button

Output laser sighting

Trigger

Battery compartment

Set technical unit (°C/°F)

■ *Supplied with*

• Case with passer-by belt
• User manual

■ *CE Certification*   (CE)

This device meets with following standards' requirements.

EN 50081-1 : 1992, Electromagnetic compatibility, Part 1
EN 50082-1 : 1992, Electromagnetic compatibility, Part 2

Infrared thermometer, how does it work ?

Infrared thermometers can measure the surface temperature of an object. Its optic lens catches the energy emitted and reflected by the object. This energy is collected and focused onto a detector. This information is displayed as temperature. The laser pointer is only used to aim at the target.

Infrared sensor

Laser sighting

Emitted energy by the object as radiation