sauermann®

DATA SHEET

KIRAY 100

°C
°F

Infrared thermometer

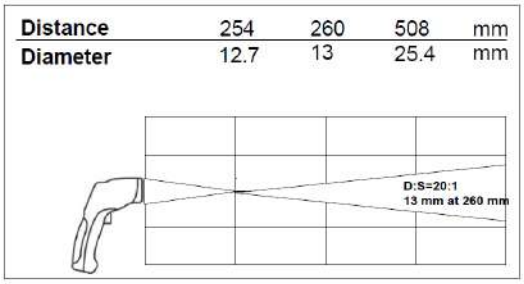
Infrared thermometer KIRAY 100 with dual laser sighting is a key tool to diagnose, inspect and check any temperature, with the advantage of using "no-contact" technology. You can safely measure surface temperatures of hot objects, dangerous or difficult to access. Perfect tool to take temperature in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

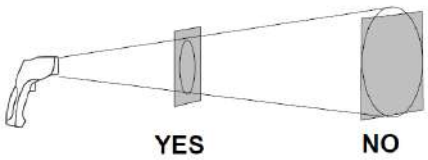
Technical specifications

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 to +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 9 V battery
Autonomy	105 h (inactive laser and backlight) 20 h (active laser and backlight)
Operating 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).

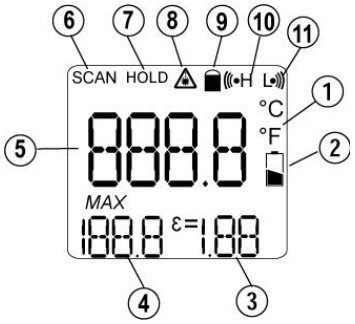
Distance from the target





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.

Kit content

- Case with passer-by belt
- User manual

CE certification

This device meets with following standards' requirements: EN 61326-1: 2013 and EN 61326-2: 2013

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.

Description

1 - LCD backlighted display
2 - IR sensor (infrared)
3 - Up button
4 - Down button
5 - Mode button

1 - Output laser sighting
2 - Trigger
3 - Set technical unit (°C/°F)
4 - Battery compartment