



DATA SHEET

KIRAY 100



Infrared thermometer

The KIRAY 100 infrared thermometer features dual laser sighting and is an essential tool for diagnosing, inspecting, and checking temperatures, all thanks to its "no-contact" technology.

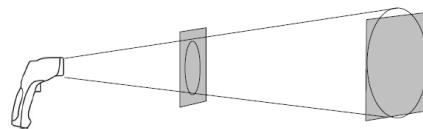
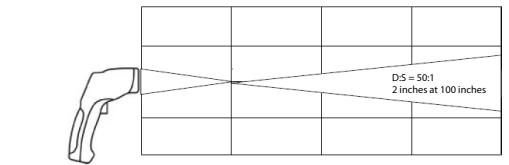
You can safely measure surface temperatures of hot objects that are dangerous or hard to reach places where contact is not possible.

Technical specifications

Spectral response	8 - 14 μ m
Optical	D.S: 20:1 ($33/64$ " at 10 $15/64$ ", 13 mm at 260 mm)
Temperature range	From -58 to +1,472 °F (from -50 to +800 °C)
Accuracy*	From -58 to +68 °F: ± 4.5 °F (from -50 to +20 °C: ± 2.5 °C) From +68 to +572 °F: $\pm 2\%$ of reading ± 3.6 °F (from +20 to +300 °C: $\pm 2\%$ of reading ± 2 °C) From +572 to +1,472 °F: $\pm 2\%$ of reading (from +300 °C to +800 °C: $\pm 2\%$ of reading)
Infrared repeatability	From -58 to +68 °F: ± 2.4 °F (from -50 to +20 °C: ± 1.3 °C) From +68 to 1472 °F: $\pm 0.5\%$ or ± 0.9 °F (from +20 to +800 °C: $\pm 0.5\%$ or ± 0.5 °C)
Display resolution	0.1 °F (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 backlit display
Auto-extinction	Automatic after 7 seconds of inactivity
High/low alarm	Flashing display signal and beep alert 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 32 to +50 °F for a short period (from 0 to +10 °C for a short period) From +51.8 to +122 °F for a long period (from +11 to +50 °C for a long period)
Storage temperature	From 14 °F to +140 °F (from -10 °C to +60 °C)
Relative humidity	From 10 to 90% RH in operating mode and > 80% RH in storage
Dimensions	5 $45/64$ x 3 $47/64$ x 1 $37/64$ " (145 x 95 x 40 mm)
Weight	0.397 lbs (180 g) included battery

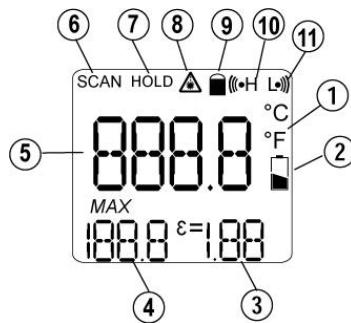
Distance from the target

Distance	50	100	150	inches
Diameter	1	2	3	inches



Ensure that the target is larger than the size of the laser sight.

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: This button increase emissivity and high/low alarm thresholds. In measurement mode, it also activates or deactivates the laser.
- 2 – Mode button: This button lets you navigate through different modes (emissivity, lock, high alarm, low alarm).
- 3 – Down button: This button decreases emissivity and high/low alarm thresholds. In measurement mode, it also activates or deactivates the backlight.



Kit content

- Case with passer-by belt
- User manual

Certification

This device meets with following standards' requirements: EN 61326-1: 2013 and EN 61326-2: 2013, FCC part 15.

How does an infrared thermometer work?

Infrared thermometers measure the surface temperature of an object by capturing the energy it emits and reflects through an optical lens. This energy is collected and focused onto a detector, which then displays the temperature. The laser pointer is used solely for aiming at the target.

Description



- 1 - LCD backlit 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

