

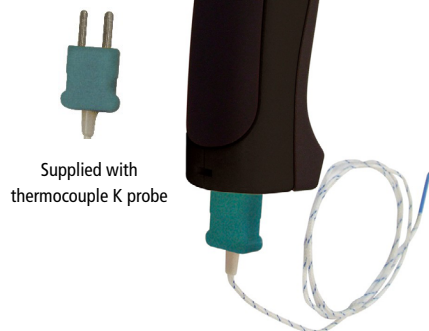
## DATA SHEET

# KIRAY 200



## Infrared thermometer

Infrared thermometer KIRAY 200 is an infrared thermometer used to diagnose, inspect and check any temperature. Thanks to its elaborated optical system, it allows an easy and accurate measurement of little distant targets. KIRAY 200 instrument has an internal memory which can save up to 20 measurements.



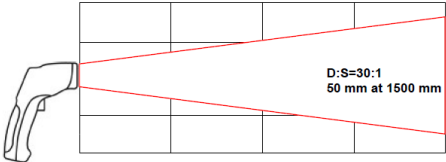
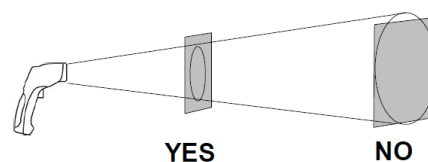
Supplied with thermocouple K probe

### Technical specifications

|                                             |                                                                                                                                                                                                             |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Spectral response                           | 8 - 14 $\mu$ m                                                                                                                                                                                              |
| Optical                                     | D.S: 30:1 (50 mm at 1500 mm)                                                                                                                                                                                |
| Temperature range                           | From -50 to +850 °C                                                                                                                                                                                         |
| Accuracy*                                   | From -50 to -20°C: $\pm 5$ °C<br>From -20 to +200 °C: $\pm 1.5\%$ of reading $\pm 2$ °C<br>From +200 to +538 °C: $\pm 2\%$ of reading $\pm 2$ °C<br>From +538 to +850 °C: $\pm 3.5\%$ of reading $\pm 5$ °C |
| Display resolution                          | 0.1 °C                                                                                                                                                                                                      |
| Response time                               | Less than 1 second                                                                                                                                                                                          |
| Emissivity                                  | Adjustable from 0.10 to 1.00 (pre-set at 0.95)                                                                                                                                                              |
| Over range indication                       | Display indication: "-OL" for a negative over range, "OL" for a positive over range.                                                                                                                        |
| Laser sighting                              | Wavelength: 630-670 nm<br>Output < 1mW, Class 2 (II)                                                                                                                                                        |
| Positive or negative temperature indication | Automatic (no indication for a positive temperature)<br>(-) sign for a negative temperature                                                                                                                 |
| Display                                     | 4 ½ digits with LCD backlight 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                                    | 38 h (inactive laser and backlight)<br>15 h (active laser and backlight)                                                                                                                                    |
| Operating temperature                       | From 0 to +10 °C for a short period<br>From 11 to +50 °C for a long period                                                                                                                                  |
| Storage temperature                         | From -20 °C to +60 °C                                                                                                                                                                                       |
| Relative humidity                           | From 10% to 90%RH in operating mode and >80%RH in storage                                                                                                                                                   |
| Dimensions                                  | 175 x 110 x 45 mm                                                                                                                                                                                           |
| Weight                                      | 230 g (included battery)                                                                                                                                                                                    |
| Memory                                      | 20 temperature values with unit of measurement (°C or °F)                                                                                                                                                   |

### Distance from target

|          |     |     |     |    |
|----------|-----|-----|-----|----|
| Distance | 150 | 300 | 900 | mm |
| Diameter | 5   | 10  | 30  | mm |

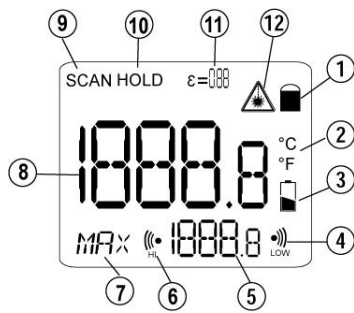
Make sure that the target is larger than the size of the laser sighting.

### Thermocouple K probe features

|                   |                                   |
|-------------------|-----------------------------------|
| Temperature range | From -40 to +400 °C               |
| Display range     | From -50 to +1370 °C              |
| Resolution        | 0.1 °C                            |
| Accuracy          | $\pm 1.5\%$ of reading $\pm 3$ °C |
| Cable length      | 1 m                               |

\*Accuracy for an ambient temperature from 18 to 28 °C (with a relative humidity lower than 80% RH)

## Display



- 1 – Continuous measurement indicator
- 2 – Technical unit (°C / °F)
- 3 – Low battery indicator
- 4 – Low alarm symbol
- 5 – MAX, MIN, DIF (difference between MAX and MIN values), AVG (average), HAL (high alarm), LAL (low alarm), TK (TK temperature) and LOG (recorded value)
- 6 – High alarm symbol
- 7 – EMS, MAX, MIN, DIF, AVG, HAL, LAL, TK and LOG indicator
- 8 – Temperature value
- 9 – Current measurement indicator
- 10 – HOLD indicator (fixed measurement)
- 11 – Emissivity value
- 12 – Laser in operation indicator

## Kiray 200 buttons

- 1 – Up button: It allows to increment emissivity and high/low alarm thresholds and to move to the next recorded value.
- 2 – Set button: It allows to activate or deactivate laser and display backlight. It allows also to record a temperature.
- 3 – Mode button: It allows to navigate through the modes (emissivity, max value, min value, difference, average, high alarm, low alarm, TK value and recorded values).
- 4 – Down button: It allows to decrement emissivity and high/low alarm thresholds and to move to the previous recorded value.



## 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 backlit display
- 2 - Up button
- 3 - Laser and backlight button
- 4 - Down button
- 5 - Mode button



- 1 - Laser sighting output
- 2 - IR sensor (infrared)
- 3 - Trigger
- 4 - Set technical Unit (°C/°F)
- 5 - Set continuous measurement (On/Off)
- 6 - Set alarm (On/Off)
- 7 - Battery compartment
- 8 - External probe input

## Kit content

- Case with passer-by belt
- User manual
- K thermocouple probe

