



HI935005

## K-Type Thermocouple Thermometers

- **°C/°F Readout**
  - Measurements can be displayed in either degrees Celsius or Fahrenheit. A simple press of the °C/°F button will switch between the scales.
- **Interchangeable Probes**
  - A wide range of K-type thermocouple probes are available to meet the specific needs of users. Any of the HI766 series of probes can be interchanged with the HI935005 to measure temperature of surfaces, gases, air, liquid, semi-solid samples, and more.
- **High/Low Function**
  - The maximum and minimum temperature values are continuously monitored and displayed on the lower portion of the HI935005 LCD display during a measurement session. The CLR button clears the high and low values on the LCD display.
- **HOLD Function**
  - The HOLD button on the face of the meter freezes the display to allow the user time to record readings. Although the display is frozen, the meter continues to internally monitor the temperature and update the high and low measurement values.
- **Auto Shut-off**
  - Users can select to enable automatic shut off after 8 or 60 minutes of non-use or select to disable the shut-off feature.
- **Battery Error Prevention System (BEPS)**
  - The Battery Error Prevention System detects when the batteries become too weak to ensure reliable measurements.
- **Low Battery Indicator**
  - When the battery level is below 10%, a warning symbol will blink to indicate low battery condition.

The HI935005 is a K-type thermocouple thermometer that can be used with a wide variety of K-type probes. This thermometer offers two measurement ranges from -50.0 to 199.9°C and 200 to 1350°C which can also be displayed in °F (-58.0 to 399.9°F and 400 to 2462°F). With a ±0.2% full scale accuracy, the HI935005 waterproof thermometers are perfectly suited for temperature measurements in the laboratory or the field.

| Specifications       | HI935005                                                                                                                         |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Range                | -50.0 to 199.9°C and 200 to 1350°C; -58.0 to 399.9°F and 400 to 2462°F                                                           |
| Resolution           | 0.1°C (-50.0 to 199.9°C) and 1°C (outside); 0.1°F (-58.0 to 399.9°F) and 1°F (outside)                                           |
| Accuracy             | ±0.2% FS (excluding probe error)                                                                                                 |
| Probe                | HI766 series K-type thermocouple (not included)*                                                                                 |
| Battery Type / Life  | 1.5V AA (3) / approximately 1600 hours of continuous use; auto-off selectable after 8 or 60 minutes of non-use (can be disabled) |
| Environment          | -10 to 50°C (14 to 122°F); RH max 100%                                                                                           |
| Dimensions           | 150 x 80 x 36 mm (5.9 x 3.1 x 1.4")                                                                                              |
| Weight               | 235 g (8.3 oz.)                                                                                                                  |
| Ordering Information | HI935005 is supplied with batteries and instruction manual.                                                                      |
| Probes               | HI766C Penetration, stainless steel K-type thermocouple temperature probe with 1 m cable                                         |
|                      | HI766D Air/gas, stainless steel K-type thermocouple temperature probe with 1 m (3.3') cable                                      |
|                      | HI766E1 General purpose/penetration, stainless steel K-type thermocouple temperature probe with 1 m (3.3') cable                 |
| Accessories          | HI710007 blue shockproof rubber boot                                                                                             |
|                      | HI710008 orange shockproof rubber boot                                                                                           |

\*K-type thermocouple probes should be ordered separately to meet your specific application.

Thermocouple probes begin on page 14.11

HI935002

## Dual-channel, K-Type Thermocouple Thermometer

- **Multiple input channels**
  - Dual input channels
- **HOLD**
  - HOLD function
- **BEPS**
  - Alerts the user of low battery power that could adversely affect readings
- **Battery indicator**
  - Battery life indicator at startup
- **Waterproof**
  - Compact, heavy-duty and waterproof

HI935002 is a 2-channel, waterproof, K-type thermometer that offers accurate temperature measurements in a wide range, as well as 1600 hours of battery life.

These units display current temperature along with the minimum and maximum temperature for each channel achieved during the measuring session. The difference between each channel can be shown, or a relative value can be set on each channel and variances around that value can be monitored.

The HOLD button freezes the display to allow the user time to record readings.

The instruments are equipped with BEPS (Battery Error Prevention System), which alerts the user in the event that low battery power could adversely affect readings.



### Specifications

### HI935002

|                     |                                                                                        |
|---------------------|----------------------------------------------------------------------------------------|
| Range               | -50.0 to 199.9°C and 200 to 1350°C; -58.0 to 399.9°F and 400 to 2462°F                 |
| Resolution          | 0.1°C (-50.0 to 199.9°C) and 1°C (outside); 0.1°F (-58.0 to 399.9°F) and 1°F (outside) |
| Accuracy            | ±0.2% f.s. (for 1 year, excluding probe error)                                         |
| Probe               | HI766 series K-type thermocouple (not included)*                                       |
| Battery Type / Life | 1.5V AA (3) / approx. 1600 hours of continuous use                                     |
| Environment         | -10 to 50°C (14 to 122°F); RH max 100%                                                 |
| Dimensions          | 150 x 80 x 36 mm (5.9 x 3.1 x 1.4")                                                    |
| Weight              | 235 g (8.3 oz.)                                                                        |

### Ordering Information

**HI935002** is supplied with batteries and instructions.

### Probes

|                |                                                                                                          |
|----------------|----------------------------------------------------------------------------------------------------------|
| <b>HI766C</b>  | Penetration, stainless steel K-type thermocouple temperature probe with 1 m cable                        |
| <b>HI766D</b>  | Air/gas, stainless steel K-type thermocouple temperature probe with 1 m (3.3') cable                     |
| <b>HI766E1</b> | General purpose/penetration, stainless steel K-type thermocouple temperature probe with 1 m (3.3') cable |

### Accessories

|                 |                               |
|-----------------|-------------------------------|
| <b>HI710007</b> | blue shockproof rubber boot   |
| <b>HI710008</b> | orange shockproof rubber boot |

\*K-type thermocouple probes should be ordered separately to meet your specific application.



HI93531 · HI93531N

## 0.1° Resolution K-Type Thermocouple Thermometers

- **HOLD**
  - HOLD function
- **BEPS**
  - Alerts the user of low battery power that could adversely affect readings
- **Battery indicator**
  - Battery life indicator at startup
- **Backlight**
  - Backlit display (N and R versions)
- **Waterproof**
  - Compact, heavy-duty and waterproof
- **Connectivity**
  - PC and printer compatible (R version)

These waterproof thermometers feature 0.1° resolution in the -149.9 to 999.9°C (-24.9 to 999.9°F) range, making them ideal for precise temperature measurements. The instruments display the current temperature along with the minimum and maximum extremes achieved.

The HOLD button freezes the display to allow the user time to record readings. The °C/°F button switches between the Celsius and Fahrenheit temperature scale. The CLR button restarts the evaluation of high and low values.

The HI93531N features a user-activated backlight for low or no light conditions. The CAL button allows a simple one-point calibration in an ice bath at 0°C when probe interchange occurs.

The instruments are equipped with BEPS (Battery Error Prevention System), which alerts the user in the event that low battery power could adversely affect readings.

| Specifications       | HI93531                                                                                                                                                             | HI93531N                                                                                                 |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Range                | -200.0 to 999.9°C; 1000 to 1371°C -328.0 to 999.9°F; 1000 to 2500°F                                                                                                 |                                                                                                          |
| Resolution           | 0.1°C (-149.9 to 999.9°C); 0.2°C (-200.0 to -150.0°C); 1°C (outside) 0.1°F (-24.9 to 999.9°F); 0.2°F (-249.9 to -25.0°F); 0.3°F (-328.0 to -250.0°F); 1°F (outside) |                                                                                                          |
| Accuracy             | ±0.5°C (-100.0 to 999.9°C); ±1°C (outside); ±1°F (-148.0 to 999.9°F); ±1.5°F (outside) (for 1 year, excluding probe error)                                          |                                                                                                          |
| Probe                | HI766 series K-type thermocouple (not included)*                                                                                                                    |                                                                                                          |
| CAL Button           | N/A                                                                                                                                                                 | yes                                                                                                      |
| Backlit LCD          | N/A                                                                                                                                                                 | yes                                                                                                      |
| RS232                | N/A                                                                                                                                                                 | N/A                                                                                                      |
| Battery Type / Life  | 1.5V AA (3) / approximately 500 hours of continuous use (with backlight off); auto-off after 60 minutes of non-use (can be disabled)                                |                                                                                                          |
| Environment          | -10 to 60°C (14 to 122°F); RH max 100%                                                                                                                              |                                                                                                          |
| Dimensions           | 150 x 80 x 36 mm (5.9 x 3.1 x 1.4")                                                                                                                                 |                                                                                                          |
| Weight               | 235 g (8.3 oz.)                                                                                                                                                     |                                                                                                          |
| Ordering Information | HI93531 and HI93531N are supplied with batteries and instructions.                                                                                                  |                                                                                                          |
| Probes*              | HI766C                                                                                                                                                              | Penetration, stainless steel K-type thermocouple temperature probe with 1 m cable                        |
|                      | HI766D                                                                                                                                                              | Air/gas, stainless steel K-type thermocouple temperature probe with 1 m (3.3') cable                     |
|                      | HI766E1                                                                                                                                                             | General purpose/penetration, stainless steel K-type thermocouple temperature probe with 1 m (3.3') cable |
| Accessories          | HI710007                                                                                                                                                            | blue shockproof rubber boot                                                                              |
|                      | HI710008                                                                                                                                                            | orange shockproof rubber boot                                                                            |

\*K-type thermocouple probes should be ordered separately to meet your specific application.