

# Fluke 566 and 568 Thermometers

## Technical Data

### Two-in-one infrared and contact thermometers with an innovative dot matrix display.

Just when you thought advanced IR temperature measurement should be easier! With a straight-forward user interface and soft-key menus, the Fluke 566 and 568 make even complex measurements easy. Quickly navigate and adjust emissivity, start data logging, or turn on and off alarms, with just a few pushes of a button.

With a rugged, easy-to-use, ergonomic design, the Fluke 566 and 568 can stand up to tough industrial, electrical, and mechanical environments.



- Measure -40 °C to 800 °C / -40 °F to 1472 °F (568) or -40 °C to 650 °C / -40 °F to 1202 °F (566)
- Easily access advanced features with the soft-key buttons and graphical display
- Measure smaller objects from further away, with a distance-to-spot ratio of 50:1 (568) or 30:1 (566)
- Compatibility with all standard miniconnector K-type thermocouples allows you to preserve your thermocouple investments
- Confidently measure a wide variety of surfaces with the adjustable emissivity feature, including a built-in material table
- Capture up to 99 points (568) or 20 point (566) of data, for downloading and recalling later
- Easily trend and analyze data with included FlukeView® Forms software (568)
- See your data right away without leaving the site, using the USB (568) and your laptop for "Hands-free" datalogging
- Confidently troubleshoot equipment with 1 % measurement accuracy
- Versatile interface with six languages from which to choose
- Two-year warranty

## Product specifications

|                                             | 566                                                                                                                                                                                                                                                                                                                               | 568                                            |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Infrared temperature range                  | -40 °C to 650 °C (-40 °F to 1202 °F)                                                                                                                                                                                                                                                                                              | -40 °C to 800 °C (-40 °F to 1472 °F)           |
| Infrared accuracy                           | $< 0\text{ °C (32 °F): } \pm (1.0\text{ °C } (\pm 2.0\text{ °F}) + 0.1\text{ °C or °F});$<br>$> 0\text{ °C (32 °F): } \pm 1\text{ % or } \pm 1.0\text{ °C } (\pm 2.0\text{ °F}), \text{ whichever is greater}$                                                                                                                    |                                                |
| Display resolution                          | 0.1 °C / 0.1 °F                                                                                                                                                                                                                                                                                                                   |                                                |
| Infrared spectral response                  | 8 µm to 14 µm                                                                                                                                                                                                                                                                                                                     |                                                |
| Infrared response time                      | < 500 msec                                                                                                                                                                                                                                                                                                                        |                                                |
| Thermocouple Type-K input temperature range | -270 °C to 1372 °C (-454 °F to 2501 °F)                                                                                                                                                                                                                                                                                           |                                                |
| Thermocouple Type-K input accuracy          | $-270\text{ °C to } -40\text{ °C: } \pm (1\text{ °C } + 0.2\text{ °/1 °C}) (-454\text{ °F to } -40\text{ °F: } \pm (2\text{ °F } + 0.2\text{ °/1 °F}))$<br>$-40\text{ °C to } 1372\text{ °C: } \pm 1\text{ % or } 1\text{ °C } (-40\text{ °F to } 2501\text{ °F: } \pm 1\text{ % or } 2\text{ °F}), \text{ whichever is greater}$ |                                                |
| D:S (distance to measurement spot size)     | 30:1                                                                                                                                                                                                                                                                                                                              | 50:1                                           |
| Laser sighting                              | Single-point laser < 1 mw output Class 2 (II) operation, 630 nm to 670 nm                                                                                                                                                                                                                                                         |                                                |
| Minimum spot size                           | 19 mm (0.75 in)                                                                                                                                                                                                                                                                                                                   |                                                |
| Emissivity adjustment                       | By built-in table of common materials or digitally adjustable from 0.10 to 1.00 by 0.01                                                                                                                                                                                                                                           |                                                |
| Data storage with Date/Time stamp           | 20 points                                                                                                                                                                                                                                                                                                                         | 99 points                                      |
| PC Interface and cable                      | None                                                                                                                                                                                                                                                                                                                              | USB 2.0 with FlukeView® Forms software         |
| Hi/Low alarms                               | Audible and two-color visual                                                                                                                                                                                                                                                                                                      |                                                |
| Min/Max/Avg/Dif                             | Yes                                                                                                                                                                                                                                                                                                                               |                                                |
| Display                                     | Dot matrix 98 x 96 pixels with function menus                                                                                                                                                                                                                                                                                     |                                                |
| Backlight                                   | Two levels, normal and extra bright for darker environments                                                                                                                                                                                                                                                                       |                                                |
| Trigger lock                                | Yes                                                                                                                                                                                                                                                                                                                               |                                                |
| Switchable Celsius and Fahrenheit           | Yes                                                                                                                                                                                                                                                                                                                               |                                                |
| Power                                       | 2 AA/LR6 Batteries                                                                                                                                                                                                                                                                                                                | 2 AA/LR6 Batteries and USB when used with a PC |
| Battery life                                | If used continuously: laser and backlight on, 12 hours; laser and backlight off, 100 hours                                                                                                                                                                                                                                        |                                                |
| Operating temperature                       | 0 °C to 50 °C (32 °F to 122 °F)                                                                                                                                                                                                                                                                                                   |                                                |
| Storage temperature                         | -20 °C to 60 °C (-40 °F to 140 °F)                                                                                                                                                                                                                                                                                                |                                                |
| Bead thermocouple Type-K range              | -40 °C to 260 °C (-40 °F to 500 °F)                                                                                                                                                                                                                                                                                               |                                                |
| Bead thermocouple Type-K accuracy           | $\pm 1.1\text{ °C (2.0 °F) from } 0\text{ °C to } 260\text{ °C (32 °F to } 500\text{ °F), typically within } 1.1\text{ °C (2.0 °F)}$<br>$\text{from } -40\text{ °C to } 0\text{ °C (-40 °F to } 32\text{ °F)}$                                                                                                                    |                                                |

## Ordering information

**Fluke-566** Infrared thermometer  
**Fluke-568** Infrared thermometer

**Includes:** Infrared thermometer with contact thermometer capabilities, FlukeView® Forms software (568 only), USB cable (568 only), K-type thermocouple bead probe, hard carrying case, quick start guide, and users manual.



**Fluke.** Keeping your world up and running.®