

# Thermal imager

**testo 865 –**  
Switch on, aim, know more.

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Infrared resolution 160 x 120 pixels  
testo SuperResolution to 320 x 240 pixels

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Automatic recognition of hot-cold spots

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The thermal imager testo 865 is the ideal entry into the world of thermography. It stands out thanks to the best image quality in its class and handy operation, is robust enough to withstand tough daily use, and has useful functions for even better thermal images.

And all this at a ground-breaking price-performance ratio. Switch on, aim, know more.

## Ordering data

### testo 865

Thermal imager testo 865 with integrated testo SuperResolution, USB cable, mains unit, Lithium ion rechargeable battery, pro software (free download), quick-start guide, short instructions, calibration certificate and case

Order no. 0560 8650



#### Accessories

#### Order no.

|                                                                                                                                         |           |  |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------|--|
| Spare battery, additional Lithium ion rechargeable battery for extending the operating time.                                            | 0515 5107 |  |
| Battery charger, desktop charging station for optimizing the charge time.                                                               | 0554 1103 |  |
| Emissivity tape, adhesive tape e.g. for bare surfaces (roll, L.: 10 m, W.: 25 mm), $\epsilon = 0.95$ , temperature-proof up to +250 °C. | 0554 0051 |  |
| Holster case                                                                                                                            | 0554 7808 |  |
| PC software testo IRSOFT for data analysis and reporting                                                                                | 0501 8809 |  |

## Technical data

#### Infrared image output

|                                      |                              |
|--------------------------------------|------------------------------|
| Infrared resolution                  | 160 x 120 pixels             |
| Thermal sensitivity (NETD)           | 120 mK                       |
| Field of view/min. focusing distance | 31° x 23° / < 0.5 m          |
| Geometric resolution (IFOV)          | 3.4 mrad                     |
| testo SuperResolution (Pixel/IFOV)   | 320 x 240 pixels<br>2.1 mrad |
| Image refresh rate                   | 9 Hz                         |
| Focus                                | Fixed focus                  |
| Spectral range                       | 7.5 to 14 µm                 |

#### Image presentation

|                 |                                            |
|-----------------|--------------------------------------------|
| Image display   | 8.9 cm (3.5") TFT, QVGA (320 x 240 pixels) |
| Display options | IR image                                   |
| Colour palettes | iron, rainbow HC, cold-hot, grey           |

#### Data interfaces

|                 |   |
|-----------------|---|
| USB 2.0 Micro B | ✓ |
|-----------------|---|

#### Measurement

|                                                 |                                                         |
|-------------------------------------------------|---------------------------------------------------------|
| Measuring range                                 | -20 to +280 °C                                          |
| Accuracy                                        | ±2 °C, ±2 % of measurement value (larger value applies) |
| Emissivity / reflected temperature compensation | 0.01 to 1 / manual                                      |

#### Measurement functions

|                    |                                                             |
|--------------------|-------------------------------------------------------------|
| Analysis functions | Mean point measurement, hot/cold-spot recognition, Delta T, |
| testo ScaleAssist  | ✓                                                           |
| IFOV warner        | ✓                                                           |

#### Imager equipment

|                 |           |
|-----------------|-----------|
| Lens            | 31° x 23° |
| Video streaming | via USB   |
| Storage as JPG  | ✓         |
| Fullscreen mode | ✓         |

#### Image storage

|             |                                                               |
|-------------|---------------------------------------------------------------|
| File format | .bmt and .jpg; export options in .bmp, .jpg, .png, .csv, .xls |
| Memory      | Internal memory (2.8 GB)                                      |

#### Power supply

|                  |                                              |
|------------------|----------------------------------------------|
| Battery type     | Li-ion battery can be changed on-site        |
| Operating time   | 4 hours                                      |
| Charging options | In instrument/in charging station (optional) |
| Mains operation  | ✓                                            |

#### Ambient conditions

|                                      |                              |
|--------------------------------------|------------------------------|
| Operating temperature range          | -15 to +50 °C                |
| Storage temperature range            | -30 to +60 °C                |
| Air humidity                         | 20 to 80 %RH, not condensing |
| Housing protection class (IEC 60529) | IP54                         |
| Vibration (IEC 60068-2-6)            | 2G                           |

#### Physical features

|                    |                  |
|--------------------|------------------|
| Weight             | 510 g            |
| Dimensions (LxWxH) | 219 x 96 x 95 mm |
| Housing            | PC - ABS         |

#### PC software

|                     |                                  |
|---------------------|----------------------------------|
| System requirements | Windows 10, Windows 8, Windows 7 |
|---------------------|----------------------------------|

#### Standards, tests

|              |            |
|--------------|------------|
| EU directive | 2014/30/EU |
|--------------|------------|