

Thermal imager

testo 868 – smart and networked thermography.

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

With testo Thermography App

Integrated digital camera

Automatic recognition of hot-cold spots

testo ScaleAssist for comparable images in building thermography

testo ϵ -Assist for the automatic determination of emissivity



testo Thermography App
for free download



Thermography connected – with the thermal imager testo 868. It has the best thermal image quality in its class, an integrated digital camera, and stands out thanks to smart new features.

The testo Thermography App wirelessly integrates measurement values, turning your smartphone or tablet into a second display. In addition to this, you can operate the imager with the App as well as creating and sending reports on site.

Ordering data

testo 868





Thermal imager testo 868 with integrated testo SuperResolution, wireless LAN module, USB cable, mains unit, Lithium ion rechargeable battery, pro software, 3 x ϵ -markers, quick-start guide, short instructions, calibration certificate and case



Order no. 0560 8681

testo Thermography App

With the testo Thermography App, your smartphone/tablet becomes a second display, and a remote control for your thermal imager. In addition to this, you can use the App to create and send compact reports on site, and to save them online. Download for Android or iOS now free of charge.

| 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 |
| testo ϵ -marker (10 off), markers for the testo ϵ -Assist function for the automatic determination of emissivity and reflected temperature. | 0554 0872 |
| Holster case | 0554 7808 |

testo ϵ -Assist

For precise thermal images, it is important to set the emissivity (ϵ) and the reflected temperature of the object being examined in the imager. Previously, this was complicated, and with regard to the reflected temperature, less than accurate. This changes with testo ϵ -Assist: Simply attach one of the reference stickers included in delivery to the measurement object. Via the integrated digital camera, the thermal imager recognizes the sticker, determines the emissivity and reflected temperature and sets both values automatically.

testo ScaleAssist

Since the temperature scale and colouring of thermal images can be adapted individually, it is possible that the thermal behaviour of a building, for example, can be wrongly interpreted. The testo ScaleAssist function solves this problem by adjusting the colour distribution of the scale to the interior and exterior temperature of the measurement object and the difference between them. This ensures objectively comparable and error-free thermal images.



Thermal image without ScaleAssist



Thermal image with ScaleAssist

Technical data

| Infrared image output | |
|---|--|
| Infrared resolution | 160 x 120 pixels |
| Thermal sensitivity (NETD) | 100 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 2.1 mrad |
| Image refresh rate | 9 Hz |
| Focus | Fixed focus |
| Spectral range | 7.5 to 14 µm |
| Visual image output | |
| Image size / min. focusing distance | at least 3.1 MP / 0.5 m |
| Image presentation | |
| Image display | 8.9 cm (3.5") TFT, QVGA (320 x 240 pixels) |
| Display options | IR image / real image |
| Colour palettes | iron, rainbow HC, cold-hot, grey |
| Data interfaces | |
| WLAN Connectivity | Communication with the testo Thermography App wireless module WLAN (EU, EFTA, USA, AUS, CDN, TR) |
| USB 2.0 Micro B | ✓ |
| Measurement | |
| Measuring ranges | Measuring range 1: -30 to +100 °C Measuring range 2: 0 to +650 °C |
| Accuracy | ±2 °C, ±2 % of measured value |
| Emissivity / reflected temperature compensation | 0.01 to 1 / manual |
| testo ε-Assist | Automatic recognition of emissivity and determination of reflected temperature (RTC) |
| Measurement functions | |
| Analysis functions | Mean point measurement, hot/cold-spot recognition, Delta T, |
| testo ScaleAssist | ✓ |
| IFOV warner | ✓ |
| Imager equipment | |
| Digital camera | ✓ |
| Lens | 31° x 23° |
| Video streaming | via USB, via wireless LAN with testo Thermography App |
| 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 | EMC: 2014/30/EU RED: 2014/53/EU |

