

Data sheet  
testo 868



Be sure. **testo**

## Thermal imager

testo 868 – smart and networked thermography.

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- 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  $\epsilon$ -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 (free download), 3 x  $\epsilon$ -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 $\epsilon$ -marker (10 off), markers for the testo $\epsilon$ -Assist function for the automatic determination of emissivity and reflected temperature.	0554 0872	
Holster case	0554 7808	
PC software testo IRSof for data analysis and reporting	0501 8809	

### testo $\epsilon$ -Assist

For precise thermal images, it is important to set the emissivity ( $\epsilon$ ) 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  $\epsilon$ -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 measurement value (larger value applies)
Emissivity / reflected temperature compensation	0.01 to 1 / manual
testo e-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

