

# Thermal imager

testo 868 – smart and networked thermography.

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

Thermal sensitivity (NETD) of < 0.08 °C (80 mK)

With testo Thermography App for on-site analysis and report generation

Automatic detection of hot and cold spots

testo ScaleAssist for comparable images in building thermography

Integrated 5 MP digital camera

IFOV warner for displaying the measurement spot size



Thermography connected – with the testo 868 thermal imager. It has the best thermal image quality in its class, an integrated digital camera, and stands out thanks to smart new features with intuitive operation with a modern tile appearance. The testo Thermography App turns 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

testo 868 thermal imager with integrated testo SuperResolution technology, radio module WLAN, USB cable, mains unit, lithium- ion rechargeable battery, professional software (free download), 3 x testo  $\varepsilon$ -markers, commissioning instructions, calibration protocol 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 Li-ion rechargeable battery for extending the operating time.	0554 8721
Battery-charging station, 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 0554 0872 reflected temperature.	
Holster case	0554 7808
PC software testo IRSoft for analysis and reporting	0501 8809

#### 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)	<0.08 °C (80 mK)
Field of view/min.	31° x 23° /
focusing distance	< 0.5 m
Geometric resolution (IFOV)	3.4 mrad
testo SuperResolution (pixels/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	1
Image size / min. focusing distance	5 MP / min. 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 interface	I
WLAN Connectivity	Communication with the testo Thermography App Wireless module WLAN (EU, EFTA, USA, AUS, CDN, TR)
USB 2.0 micro B	v
Measurement	
Measuring ranges	Measuring range 1: -30 to +100 °C Measuring range 2: 0 to +650 °C Manual/automatic switchover
Accuracy	±2 °C, ±2 % of measured value (higher value applies)
Emissivity/reflected temperature adjustment	0.01 to 1 / manual
testo ε-Assist	Automatic recognition of emissivity and determination of reflected temperature (RTC
Measuring functions	
Analysis functions	Centre point measurement, hot/cold spot detection, delta T
testo ScaleAssist	<ul> <li>✓</li> </ul>
IFOV warner	V
Imager features	·
	V
Digital camera	V
	31° x 23°
Digital camera	
Digital camera Lens	31° x 23° via USB

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	lithium ion rechargeable battery exchangeable on site	
Operating time	4 hours	
Charging options	In instrument/in charging station (optional)	
Mains operation	<ul> <li>✓</li> </ul>	
Ambient conditions		
Operating temperature range	-15 to +50 °C	
Storage temperature range	-30 to +60 °C	
Air humidity	20 to 80 %RH, non-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 8.1	
Standards, tests		
EU Directive	EMC: 2014/30/EU RED: 2014/53/EU	





www.testo.com