

Thermal imager

testo 868 - smart and networked thermography.

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

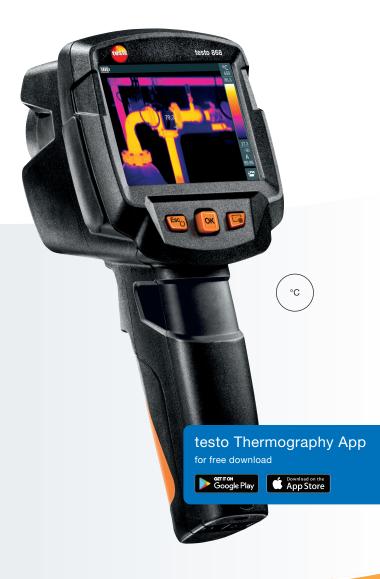
Smartphone/tablet connection via testo Thermography App

Integrated digital camera

Automatic recognition of hot and cold spots

testo ScaleAssist for comparable images in building thermography

testo ε-Assist for the automatic determination of emissivity



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 integrates measurement values wirelessly, 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 WiFi, USB cable, mains unit, Lithium-ion rechargeable battery, 3 x ε-markers, quick-start guide, short instructions, calibration protocol and

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 devices 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 optimising the charge time.	0554 1103	
testo ϵ -marker (10 pcs), markers for the testo ϵ -Assist function for the automatic determination of emissivity and reflected temperature.		
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 by the imager. Previously, this was complicated, and with regard to the reflected temperature, less 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 recognises 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.	31° x 23° /
focusing distance	< 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 to14 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 BT/WLAN (EU, EFTA, USA, AUS, CDN, TR)
USB 2.0 Micro B	4
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 function	ns
Analysis functions	Mean point measurement, hot/cold-spot recognition, Delta T,
testo ScaleAssist	4
IFOV warner	4
Imager equipment	
Digital camera	4
Lens	31° x 23°
Video streaming	via USB, via wireless LAN with testo Thermography App
Storage as JPG	4
Fullscreen mode	4

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 L	Lithium-ion battery - can be changed on-site	
Operating time	4 hours	
Charging options	In instrument/in charging station (optional)	
Mains operation	4	
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, warranty		
FU directive	EMC: 2014/30/EU	
LO directive	RED: 2014/53/EU	

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