Datasheet
testo 872

We measure it. testo

Thermal imager

testo 872 – Smart thermography with the highest image quality.

- Infrared resolution 320 x 240 pixels (with testo SuperResolution technology 640 x 480 pixels)
- Thermal sensitivity 60 mK
- Integrated digital laser marker
- With testo Thermography App
- Wireless measurement data transfer from clamp meter testo 770-3 and humidity measuring instrument testo 605i
- With testo ScaleAssist and testo ε-Assist

The testo 872 thermal imager stands out thanks to its resolution of 320 x 240 pixels, an excellent thermal sensitivity, numerous innovative functions, smartphone connection via the testo Thermography App and the best price-performance ratio of its class.

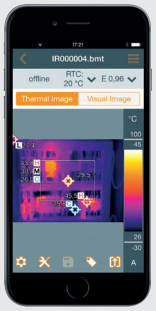
For even more meaningful thermal images, the thermal imager testo 872 also wirelessly integrates the measurement values of the clamp probe testo 770-3 as well as the thermohygrometer testo 605i (both available as an option).

Ordering data

testo 872

Thermal imager testo 872 with wireless module BT/wireless LAN, 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 8721



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.

GET IT ON Google Play

Download on the App Store

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	
ISO calibration certificate, calibration points at 0 °C, +25 °C, +50 °C	0520 0489	
ISO calibration certificate, calibration points at 0 °C, +100 °C, +200 °C	0520 0490	
ISO calibration certificate, freely selectable calibration points in the range -18 to +250 °C	0520 0495	

Compatible measuring instruments for more meaningful thermal images	Order no.	
testo 605i thermohygrometer with smartphone operation, including batteries and calibration protocol • Measurement of air humidity and air temperature • Transmission of measurement values to the testo 872 thermal imager via Bluetooth, and identification of mould-risk areas using a traffic-light system	0560 1605	
testo 770-3 clamp meter including batteries and 1 set of measuring cables • Easy to operate thanks to the fully retractable pincer arm • Auto AC/DC and large two-line display • Transmission of measurement values to the testo 872 thermal imager via Bluetooth	0590 7703	

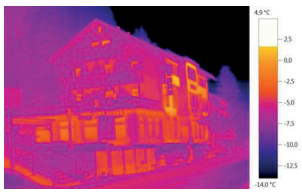
testo ε-Assist

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	320 x 240 pixels
Thermal sensitivity (NETD)	60 mK
Field of view/min. focusing distance	42° x 30° / < 0.5 m
Geometric resolution (IFOV)	2.3 mrad
testo SuperResolution (pixels/IFOV)	640 x 480 pixels 1.3 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)
Digital zoom	2x, 4x
Display options	IR image / real image
Colour palettes	iron, rainbow, rainbow HC, cold-hot, blue-red, grey, inverted grey, sepia, Testo, iron HT
Data interfaces	
WLAN Connectivity	Communication with the testo Thermography App
Bluetooth[1)]	Measurement value transfer from thermohygrometer testo 605i, clamp meter testo 770-3 (optional)
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, area measurement (min-max on area)
testo ScaleAssist	✔
IFOV warner	✔
Humidity mode – manual	✔
Humidity measurement with humidity measuring instrument[1)]	Automatic measurement value transfer of thermohygrometer testo 605i via Bluetooth (instrument must be ordered separately)
Solar mode – manual	Input of solar radiation value
Electrical mode – manual	Input of current, voltage or power
Electrical measurement with clamp meter[1)]	Automatic measurement value transfer of clamp meter testo 770-3 via Bluetooth (instrument must be ordered separately)

Imager equipment	
Digital camera	✔
Lens	42° x 30°
Laser[2)]	Laser class 2
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, warranty	
EU directive	EMC: 2014/30/EU RED: 2014/53/EU
Warranty	2 years

[1)] Wireless permit in EU, EFTA, USA, Canada, Australia, Turkey
[2)] excepting USA, China and Japan

We measure it.

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Subject to change, including technical modifications, without notice.

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