

# 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  $\epsilon$ -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  $\epsilon$ -markers, quick-start guide, short instructions, calibration protocol\* and case

\*calibration certificate (optional) (on extra charges)

Order no. 0560 8721



# #100000 best office #1000 \$ 0.50 \$ 0.

### 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	
PC software testo IRSoft for data analysis and reporting	0501 8809	
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 ( $\epsilon$ ) 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	320 x 240 pixels	
Thermal sensitivity (NETD)	60 mK	
Field of view/min. focusing distance	42° x 30° / < 0.2 m to 0.5 m	
Geometric resolution (IFOV)/spatial resolution	1.3 mrad	
testo Super Resolution (pixels)	640 x 480 pixels	
Image refresh rate	9 Hz	
Focus	Manual *	
Spectral range	7.5 to14 µm	
Visual image output		
Image size	at least 3.1 MP /	
Image presentation		
Image display	8.9 cm (3.5") TFT, QVGA (320 x 240 pixels)	
Digital zoom	4x (in steps)	
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 <sup>1)</sup>	Measurement value transfer from thermohygrometer testo 605i, clamp meter testo 770-3 (optional)	
USB 2.0 Micro B	V	
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, area measurement (min-max on area)	
testo ScaleAssist	V	
IFOV warner	· · · · · · · · · · · · · · · · · · ·	
Humidity mode – manual	V	
Humidity measurement with humidity measuring instrument <sup>1)</sup>	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 <sup>1)</sup>	Automatic measurement value transfer of clamp meter testo 770-3 via Bluetooth (instrument must be ordered separately)	

Imager equipment	
Digital camera	V
Lens	42° x 30°
Laser <sup>2)</sup>	Laser class 2
Video streaming	via USB, via wireless LAN with testo Thermography App
Storage as JPG	V
Fullscreen mode	V
Image storage	
File format	.bmt and .jpg; export options in .bmp, .jpg .png, .csv, .xls
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	V
Ambient conditions	
Operating temperature range	-15 to +50 °C
Storage temperature range	-30 to +60 °C
Air humidity	10 to 90%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, warr	ranty
EU directive	EMC: 2014/30/EU RED: 2014/53/EU
Warranty	2 years
1) Wireless permit in EU, 2) excepting USA, China	EFTA, USA, Canada, Australia, Turkey

<sup>\*</sup>Manual projection on object without any button, auto adjustment

<sup>\*\*</sup> Automatic active temperature stabilization system of camera