GENERAFRIO
LIDERES EN SISTEMAS DE AIRE ACONDICIONADO Y REFRIGERACION

Be sure. testo

Data sheet
testo 871

Thermal imager

testo 871 – smart thermography for professional demands.

- Infrared resolution 240 x 180 pixels with testo SuperResolution technology 480 × 360 pixels
- Thermal sensitivity (NETD) of < 0.08 °C (80 mK)
- With testo Thermography App for on-site analysis and report generation
- Integration of further measurement parameters via Bluetooth
- 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

°C

%RH

testo Thermography App
for free download
GET IT ON Google Play
Download on the App Store

The testo 871 thermal imager offers a high-quality 240 x 180 pixel detector, connectivity via the testo Thermography App and numerous innovative functions. It fits comfortably in the hand and convinces with intuitive operation in a modern tile look.

For even more meaningful thermal images, the thermal imager 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 871

testo 871 thermal imager with integrated testo SuperResolution technology, radio module BT/WLAN, USB cable, mains unit, lithium-ion rechargeable battery, professional software (free download), 3 x testo ε-markers, commissioning instructions, calibration protocol and case

Order no. 0560 8712

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.

Download on the App Store

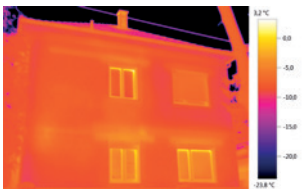
GET IT ON Google Play

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 reflected temperature.	0554 0872	
Holster case	0554 7808	
PC software testo IRSoft for 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 • Direct transmission of measured values to the testo 871 thermal imager via Bluetooth and detection of mould-risk areas with traffic light principle	0560 2605 02	
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 readings to the thermal imager testo 871 via Bluetooth	0590 7703	

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	240 x 180 pixels
Thermal sensitivity (NETD)	<0.08 °C (80 mK)
Field of view/min. focusing distance	35° x 26° / < 0.5 m
Geometric resolution (IFOV)	2.6 mrad
testo SuperResolution (pixels/IFOV)	480 x 360 pixels 1.6 mrad
Image refresh rate	9 Hz
Focus	Fixed focus
Spectral range	7.5 to 14 µm
Visual image output	
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	
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 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	✔
IFOV warner	✔
Humidity mode – manual	✔
Humidity measurement with humidity measuring instrument[1)]	Automatic data transfer of testo 605i thermohygrometer 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 data transfer of testo 770-3 clamp meter via Bluetooth (instrument must be ordered separately)

Imager features	
Digital camera	✔
Lens	35° x 26°
Video streaming	via USB via WLAN 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	lithium ion rechargeable battery exchangeable 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, 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 11, Windows 10, Windows 8.1
Standards, tests	
EU Directive	EMC: 2014/30/EU RED: 2014/53/EU

[1)] Wireless permit in EU, EFTA, USA, Canada, Australia, Turkey

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Subject to change without notice.

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