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Thermal imager

testo 872s – Smart thermography with the highest image quality.

Infrared resolution 320 x 240 pixels
with testo SuperResolution technology 640 × 480 pixels

Thermal sensitivity (NETD) of < 0.09 °F (0.05 °C) (50 mK)

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, and IFOV warner

Integrated 5 MP digital camera

Integrated laser marker – also precisely visible as a measuring
point in the thermal image

°F

°C

%RH

testo Thermography App
for free download

GET IT ON Google Play

Download on the App Store

The testo 872s thermal imager stands out thanks to its resolution of 320 x 240 pixels (640 X 480 pixels with testo SuperResolution), a very high thermal sensitivity, numerous innovative functions, smartphone connection via the testo Thermography App and the best price-performance ratio of its class.

In addition to this, it fits comfortably in the hand and convinces with intuitive operation in a modern tile look. For even more meaningful thermal images, the testo 872s thermal imager also integrates the measurement values of the (optional) testo 605i thermohygrometer Smart Probe via Bluetooth.

Ordering data

testo 872s

testo 872s thermal imager with integrated testo SuperResolution technology, radio module BT/Wi-Fi, USB cable, power supply, lithium-ion rechargeable battery, professional software (free download), 3 x testo ε-markers, commissioning instructions, calibration protocol and case

Order no. 0560 8725

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), 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
NIST Temperature certificate for thermal imagers (5 temperature points)	400520 1913

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 872a thermal imager via Bluetooth and detection of mold-risk areas with traffic light principle	0560 2605 03

testo ScaleAssist

Since the temperature scale and coloring of thermal images can be adapted individually, it is possible that the thermal behavior of a building, for example, can be wrongly interpreted. The testo ScaleAssist function solves this problem by adjusting the color 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)	< 0.09 °F (0.05 °C) (50 mK)
Field of view/min. focusing distance	42° x 30° / < 1.6 ft (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 to 14 µm

Visual image output	
Image size / min. focusing distance	5 MP / min. 1.6 ft (0.5 m)

Image presentation	
Image display	8.9 cm (3.5") TFT, QVGA
Digital zoom	2x, 4x
Display options	IR image / real image
Color palettes	Iron, rainbow, rainbow HC, cold-hot, blue-red, grey, inverted grey, sepia, Testo, iron HT

Data interface	
Wi-Fi Connectivity	Communication with the testo Thermography App
Bluetooth[1]	Measurement value transfer from thermohygrometer testo 605i (optional)
USB 2.0 micro B	✔

Measurement	
Measuring ranges	Measuring range 1: -22 to 212°F (-30 to +100 °C) Measuring range 2: 0 to 1,202 °F (0 to +650 °C) Manual/automatic switchover
Accuracy	±3.6 °F (±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 recognition, Delta T, area measurement (min-max on area)
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

Imager features	
Digital camera	✔
Lens	42° x 30°
Laser	Laser class 2
Video streaming	via USB via Wi-Fi 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)
Power supply included	✔

Ambient conditions	
Operating temperature range	5 to 122 °F (-15 to +50 °C)
Storage temperature range	-22 to 140 °F (-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	1.12 lbs (510 g)
Dimensions (LxWxH)	8.6 X 3.8 X 3.7 in (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

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

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Subject to change without notice.