Simply see more without contact.

The measuring instrument for every application: there are hardly any measuring instruments that are as versatile as a thermal imager. The areas where the visualisation of temperatures makes your work easier include the following:

- In building thermography a Testo thermal camera helps you to detect thermal bridges and structural defects.
- In heating engineering you can use thermography to check underfloor heating is working properly or for the non-destructive detection of leaks.
- In maintenance a thermal camera enables you to see wear before systems fail.
- In electrical inspection, thermography enables the immediate and precise detection of both existing defects and potential sources of faults and danger.

Testo thermal imagers:

- prevent damage and save money
- stand out thanks to razor-sharp images
- ensure fast, comprehensive analysis
- are intuitively operated
- guarantee a large image section thanks to the wide-angle lenses

For day-to-day work in buildings, heating, electrical and preventative maintenance

Thanks to outstanding detector and lens quality as well as intelligent system solutions, details are never overlooked. In addition to the intuitive menu, the PC software IRSoft guarantees fast and comprehensive analysis of the image data.

Even the smallest temperature differences can be identified with the excellent temperature resolution of Testo thermal imagers. Thermography with Testo thermal imagers saves you time, energy and money.

Optimum image quality and innovative technology

Testo offers the right thermal imager for every application in thermography. With high-quality germanium optics and the best detector quality, Testo thermal imagers guarantee optimum image quality for every thermographic application. With SuperResolution technology, the geometric resolution of each thermal image is improved by a factor of 1.6 – with four times more pixels.

High-performance, intuitive and reliable

Intuitive operation and user-friendly handling offer security and flexibility in every situation. The high-performance PC software IRSoft offers extensive functions for the professional analysis of your thermal images: It allows sophisticated image analyses, provides templates for convenient reporting and with TwinPix offers image overlay of real and thermal images. This means the information from both these images can be presented together in one image on the PC.

What is thermography?

Infrared radiation cannot be seen by the human eye. Thermal imagers, on the other hand, can convert this infrared radiation into electrical signals and present them as a thermal image. This makes the heat radiation visible for humans.

Optimum image resolution, high-quality system components and quality "Made in Germany": simply better thermography with Testo and the experience of over 60 years in measurement technology!

SUPER RESOLUTION 4x MORE PIXELS

Testo thermal imaging camera range.

testo 865s
thermal imaging camera
NEW

- Infrared resolution 160 x 120 pixels (with testo SuperResolution Technology 320 x 240 pixels)
- Thermal sensitivity 100mk/0.1 °C
- Automatic detection of hot and cold spots
- Measuring range: -20 to +280°C

Order no.   0560 8651

testo 868s
thermal imaging camera
NEW

- Infrared resolution 160 x 120 pixels (with testo SuperResolution Technology 320 x 240 pixels)
- Thermal sensitivity 100mk/0.1 °C
- Integrated digital camera
- testo Thermography App
- Measuring range:-30 to +100°C; 0 to +650°C

Order no.   0560 8684

testo 871s
thermal imaging camera
NEW

- Infrared resolution 240 x 180 pixels (with testo SuperResolution technology 480 x 360 pixels)
- Thermal sensitivity 80mk/0.08 °C
- Integrated digital camera
- Wireless measurement data transfer from testo 770-3 clamp meter for electrical thermography and testo 605i for humidity measuring instrument
- testo Thermography App
- Measuring range: -30 to +100°C; 0 to +650°C

Order no.   0560 8716

testo 872s
thermal imaging camera
NEW

- Infrared resolution 320 x 240 pixels (with testo SuperResolution Technology 640 x 480 pixels)
- Thermal sensitivity 50mk/0.05 °C
- Integrated digital camera and laser marker
- Wireless measurement data from testo 770-3 clamp meter and testo 605i humidity measuring instrument (sold seperately)
- testo Thermography App
- Measuring range: -30 to +100°C; 0 to +650°C

Order no.   0560 8725

For even more meaningful thermal images, the testo 871s and 872s thermal imagers also integrate the measurement values of the clamp probe testo 770-3, as well as the thermohygrometer testo 605i via a Bluetooth connection.

The testo 605i is also available as an option on the testo 871s. The testo 770-3 is available as an option with both thermal imagers.

The brand new testo 883: Now available.

NEW

testo 883	testo 883 kit

Scope of delivery:
- testo 883 thermal imager with standard lens 30° x 23°
- Robust case
- Professional IRSoft software (free download)
- USB-C cable
- USB mains unit
- Li-ion rechargeable battery
- Carrying strap for the thermal imager
- Bluetooth headset (depending on the country)
- Short instructions
- Calibration protocol

Order no. 0560 8830

Scope of delivery:
- testo 883 thermal imager with standard lens 30° x 23°
- Robust case
- Professional IRSoft software (free download)
- USB-C cable
- USB mains unit
- Li-ion rechargeable battery
- Carrying strap for the thermal imager
- Bluetooth headset (depending on the country)
- Short instructions
- Calibration protocol

Kit advantages
- Interchangeable lenses immediately prepare you for all eventualities
- You benefit from the lower kit price compared to buying individually.

- Telephoto lens 12° x 9°
- Additional Li-ion rechargeable battery
- Battery-charging station

Order no. 0563 8830

Accessories

Compatible measuring instruments for more meaningful thermal images	Order no.
testo 605i thermohygrometer with smartphone operation, including batteries and calibration protocol	0560 2605 02

Accessories	Order no.
Telephoto lens 12° x 9°	*
Spare battery, additional Li-ion rechargeable battery for extending the operating time.	0554 8831
Battery-charging station, desktop charging station for optimizing the charge time.	0554 8801
Lens protection glass, Special germanium protective glass for optimum protection of the lens against dust and scratching	0554 8805
testo ε-marker (10 off), markers for the testo ε-Assist function for the automatic determination of emissivity and reflected temperature.	0554 0872
Emission tape. Adhesive tape e.g. for bare surfaces (roll, L.: 10 m, W.: 25 mm), ε = 0.95, temperature-resistant up to +250 °C	0554 0051
PC software testo IRSoft for analysis and reporting (as a download)	
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

* Please contact customer service. POA on calibration.

Testo thermal imaging cameras
for many applications.

Thermal imaging cameras are highly versatile and can be deployed wherever there is a need to visualise temperature, making them a measuring instrument for many varied applications.
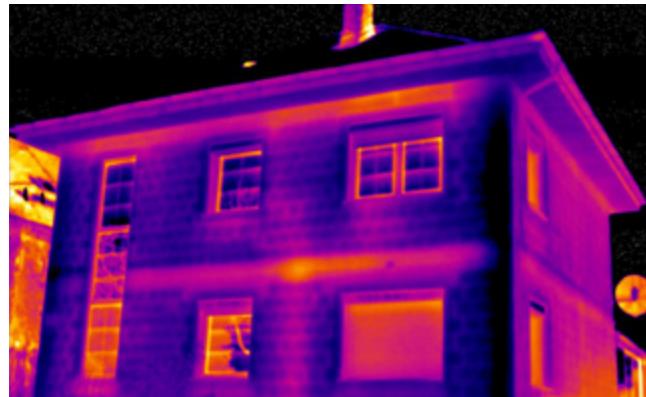
1. Detecting structural defects and ensuring construction quality

Inspection with a Testo thermal imager is a fast and efficient method of detecting possible structural defects. In addition, Testo thermal imagers are suitable as proof of the quality and the correct implementation of structural renovation measures. Heat loss, moisture and lack of air-tightness in a building are visible in a thermal image. Faulty thermal insulation and structural damage are also detected – without contact.


2. Carrying out detailed energy consultancy

In building thermography, infrared technology is ideally suited for the fast and effective analysis of energy losses in the heating or air conditioning of buildings. Thanks to their high temperature resolution, Testo thermal imagers provide detailed images of inadequate insulation and thermal bridges. They are ideal for the recording and documentation of energy losses on outer windows and doors, roller blind casings, radiator niches, in roof structures or the entire building shell. Testo thermal imagers are the perfect tool for comprehensive diagnosis and maintenance when providing energy consultation services.
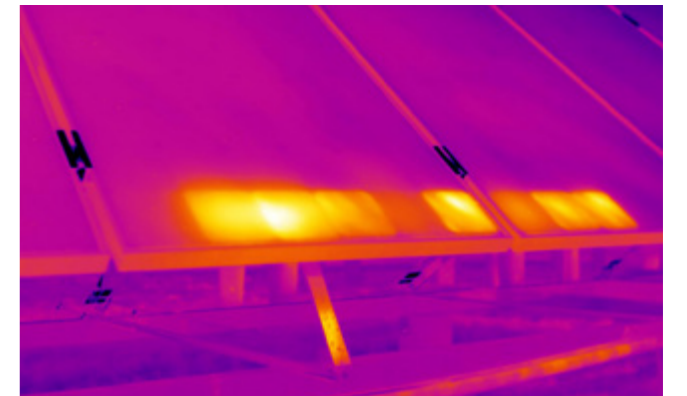
3. Electrical testing

Testo thermal imaging cameras allow a safe and effective evaluation of the heat status of low, medium, and high voltage electrical systems. Thermal imaging can lead to early diagnosis and recognition of defective components and connections, so that the required preventative steps can be taken. This minimises the potential risk of overheating and subsequent fires that can be initiated, and also avoids costly production downtime through preventative maintenance.
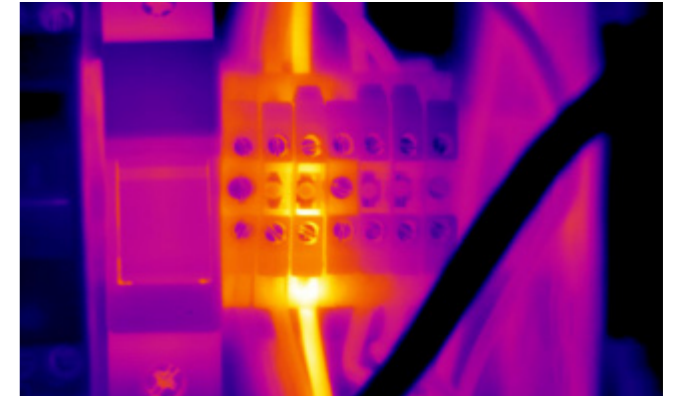

4. Monitoring and checking solar energy systems

There are two main reasons for inspecting solar energy systems: safety and performance monitoring. Solar energy systems achieve their top performance in full sunshine. Testo thermal imagers can be used to monitor photovoltaic systems of all sizes in a way that is wide-ranging, contact-free and exceptionally efficient. Malfunctions are detected, the proper functioning of all components is ensured and the greatest possible efficiency is thus achieved. The option of inputting solar radiation intensity, the key measurement parameter, offers extra reliability: the value entered is stored with the thermal image and is subsequently available for image analysis.


5. Mechanical testing :

With many mechanical systems a high level of heat emissions could be indicative of problems such as frictional wear or lack of lubrication. With the ability to work across a wide temperature range testo thermal imaging cameras can offer a fast non-contact route to diagnosis of such issues in a wide range of mechanical systems such as motors, gearboxes, bearings, conveyors, heat-sealing, and general process machinery. The ability to take images over a time period allows engineers to determine general wear cycles across operating machinery to then ensure correct preventative maintenance takes place.
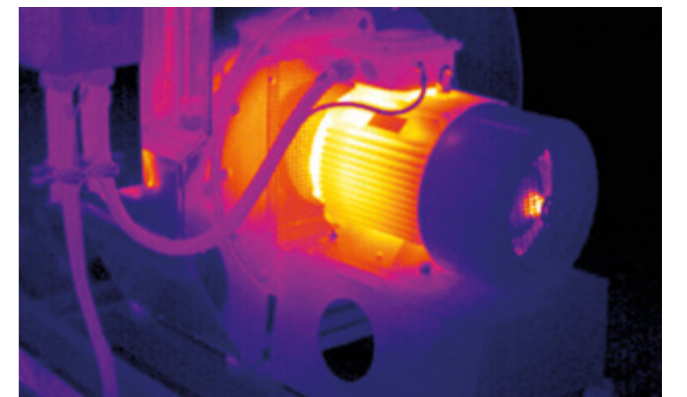
6. Investigating moisture damage

Not every damp wall is caused by a ruptured pipe. Rising damp or penetrating water due to the faulty implementation of rain and drain water flow-off can cause damp walls. Moisture damage can also occur due to blocked drains or insufficient seepage. Testo thermal imagers find the cause of rising damp or penetrating rainwater straight away, before the water causes major damage.
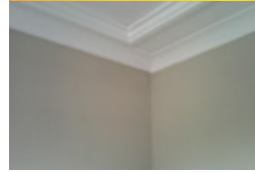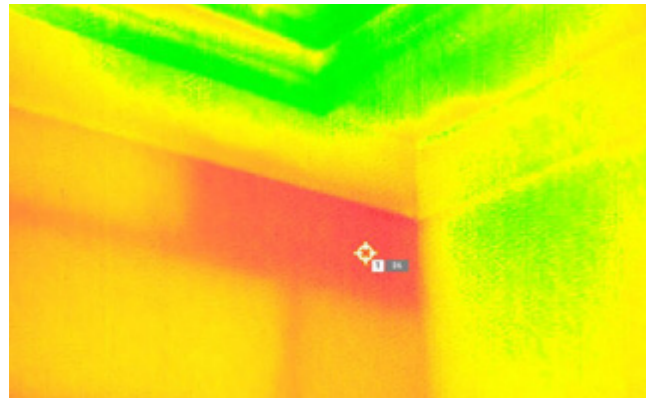
7. Preventing mould formation

Thermal bridges waste energy. Condensation can also form in these places due to humidity in the ambient air. As a result, mould forms in these locations with the associated health risks for the occupants. Testo thermal imagers use the externally determined ambient temperature and humidity as well as the measured surface temperature to calculate the relative surface moisture value for each measuring point. The mould risk is therefore visible on the display before it becomes visible to the naked eye: areas at risk are displayed in red, those not at risk in green. This makes it possible to introduce measures to prevent dangerous mould formation at an early stage - including in hidden corners and niches.
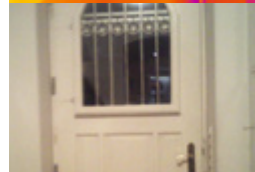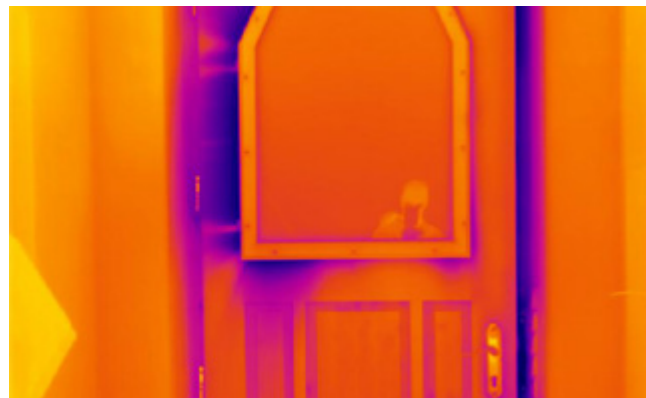
8. Testing the air tightness of new buildings

If doors or windows are not correctly fitted, in winter cold air can enter or warm indoor air can escape. This results in draughts, increased ventilation heat loss and above all high energy costs. The combination of thermography and BlowerDoor has proved its worth. This procedure involves creating a negative pressure in the building, so that cool outside air can flow into the interior of the building through leaky joints and cracks. The Testo thermal imager makes it easy to detect any leaks.

9. Locate roof leaks exactly

Damp areas in the roof structure, in particular in flat roofs, store the warmth from the sun for longer than intact areas. This means the roof structure cools unevenly in the evenings. Testo thermal imagers use these temperature differences to pinpoint the exact roof areas with trapped moisture or damaged sealing.
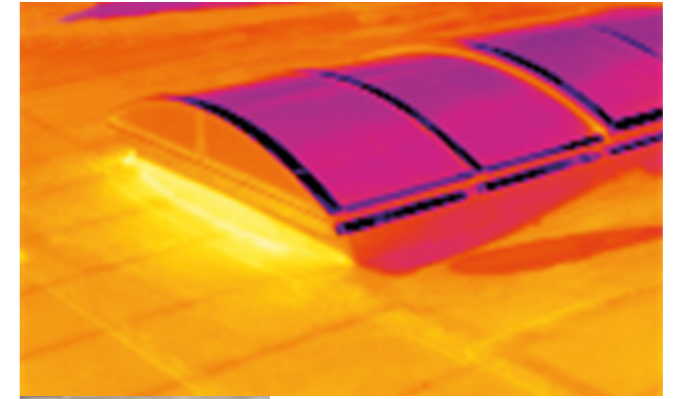
10. Easy checking of heating systems and installations

Testo thermal imagers can be used to quickly and reliably check heating, ventilation and air conditioning installations as they are easy and intuitive to operate. A glance with the thermal imager is enough to discover irregular temperature distribution. Silting and blockages in radiators, for example, are reliably detected.
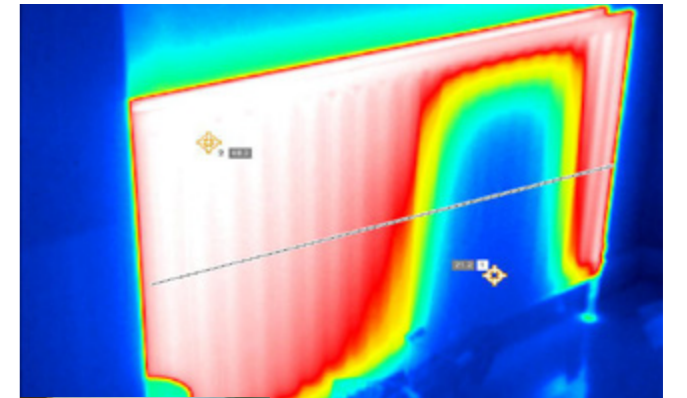
11. Hot on the trail of a ruptured pipe

If a pipe rupture is suspected, often the only solution is to break open the entire wall or flooring area. With Testo thermal imagers, you can minimise the damage and reduce the cost of your work. Leakages in underfloor heating and other inaccessible pipes are located precisely and without damage. This avoids opening walls unnecessarily and considerably reduces the repair costs.
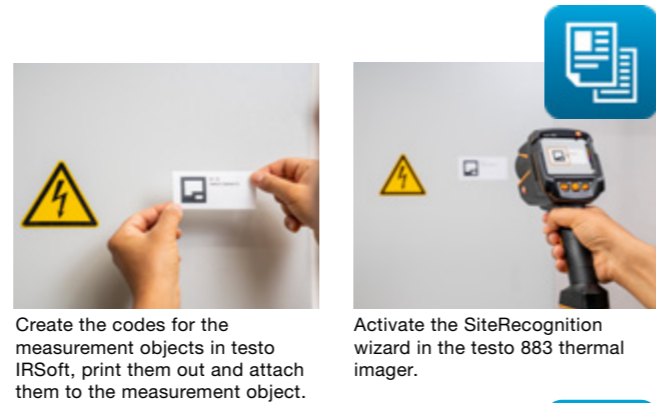
Functions of testo thermal imaging cameras.

testo ScaleAssist: Comparable thermal images

With testo ScaleAssist, the correct evaluation of construction errors and thermal bridges is easier than ever before, since the thermal image scale is automatically and optimally set. This prevents interpretation errors which can be caused by a false setting of the scaling. Undesired extreme temperatures are automatically filtered out, and building faults realistically presented. This makes infrared images comparable in spite of altered ambient conditions. This is of great significance in before-and-after images, for example.

Without ScaleAssist

With ScaleAssist ▶
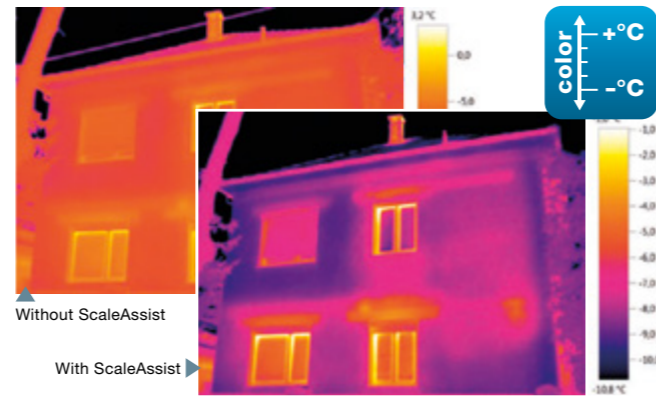
testo SiteRecognition: Automatic image management

Measuring a lot of similar objects means a lot of similar thermal images. Previously, in order to clearly allocate and identify images after an inspection, you had to create complex lists or add a voice comment to each thermal image. The testo SiteRecognition technology guarantees fully automatic site recognition, as well as storage and management of the thermal images. This rules out any mix-ups, prevents errors during evaluation and saves time by eliminating the need for manual image assignment.

Create the codes for the measurement objects in testo IRSoft, print them out and attach them to the measurement object.

Activate the SiteRecognition wizard in the testo 883 thermal imager.

testo Thermography App for analysis and reporting

With the free testo Thermography App, available for iOS and Android, compact reports can be made quickly, saved online and sent by e-mail. Apart from this, the App offers useful tools for fast analysis on site – for example, when inserting additional measurement points, determining the temperature development via a line or adding comments to a thermal image. Also very useful: With the App you can use your smartphone/tablet as a second display or as a remote control.

testo Thermography App: download free of charge for iOS or Android
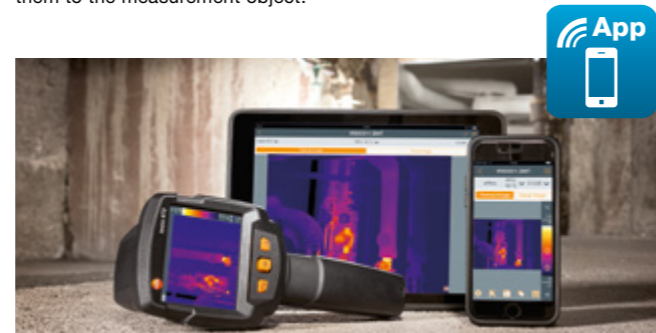
Connectivity with testo 605i and testo 770-3

The testo 871 and 872 thermal imaging cameras can be connected wirelessly to the thermohygrometer testo 605i and the clamp probe testo 770-3. The measurement values of both compact measuring instruments are transmitted to the imagers by Bluetooth. This allows you to identify quickly and clearly in the thermal image where exactly in a building damp spots are located or at what load a switching cabinet is running.
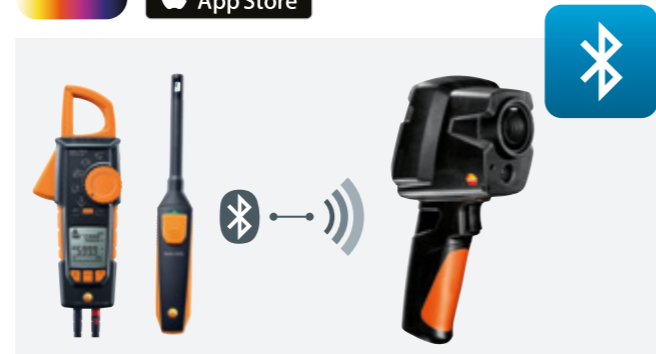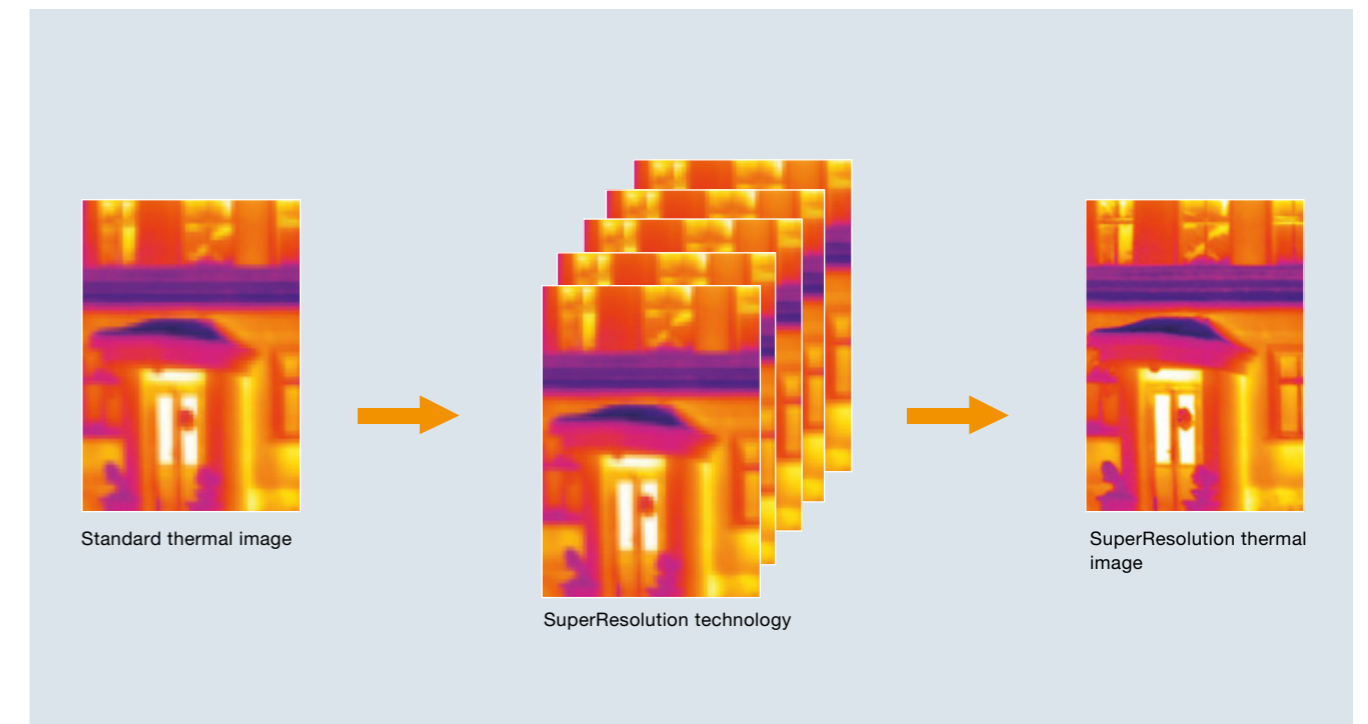
Testo SuperResolution technology.

High-resolution thermal images

Optimum thermography is simple: the better the image resolution and the more pixels, the more detailed and clearer the display of the measuring object will be. And high-resolution image quality is particularly essential if you are unable to get very close to the measuring object or need to detect the finest structures. This is because the more you can detect in the thermal image, the better your analysis will be.

Standard thermal image

SuperResolution technology

SuperResolution thermal image

Simply see more with SuperResolution

With the SuperResolution technology included in all Testo thermal imagers, the image quality of the Testo thermal imagers is improved by one class, i.e. by four times more pixels and a geometric resolution improved by a factor of 1.6. For example, 160 x 120 pixels turns into 320 x 240 pixels, or 640 x 480 pixels into 1280 x 960 pixels.

The innovation from Testo uses your natural hand movements and takes multiple, slightly offset images very rapidly one after another. Using an algorithm, these are then calculated to obtain an image. The result: Four times more pixels and a considerably better geometric resolution of the thermal image. The SuperResolution technology thus delivers high-resolution thermal images. In the case of the thermal imagers testo 865, testo 868, testo 871 and testo 872, the SuperResolution thermal images can be viewed directly in the imager and in the Thermography App.

SUPER RESOLUTION 4x MORE PIXELS

Testo SiteRecognition:
# Automatic thermal image management.

A typical problem in maintenance:
A lot of similar measuring objects mean a lot of similar thermal images. Previously, in order to clearly allocate the images after an inspection, you had to create complex lists or add a voice comment to each individual thermal image.

An innovation from Testo now solves these problems: The testo SiteRecognition technology guarantees fully automatic site recognition, as well as storage and management of the thermal images. This rules out any mix-ups, prevents errors during evaluation and saves time by eliminating the need for manual image assignment.

How testo SiteRecognition works
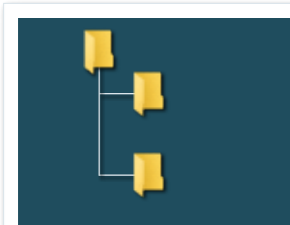
**1a.** Create a list of your measurement objects in the testo IRSoft PC software.

2a. Create the codes for the measurement objects in testo IRSoft, print them out and attach them to the measurement object.

3. Activate the SiteRecognition wizard in the testo 883 thermal imager.

The testo 883 automatically recognizes the codes during the measurement and saves the respective measuring location information together with the thermal image.
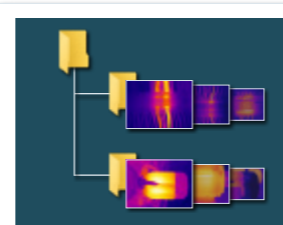
4. When synchronizing the imager with testo IRSoft, the thermal images are automatically assigned correctly.

You can also export the work results again for third-party programs. This saves time and is highly intuitive.

If you already use codes for your measurement objects and/or have inventory lists:

1b. Import your existing inventory list with the codes into the testo IRSoft PC software.

2b. Transfer the data to the testo 883 thermal imager.

PC software IRSoft.

IRSoft – the high-performance PC software for professional thermography analysis from Testo. IRSoft enables thermograms to be analysed comprehensively on a PC. It is characterised by its clear structure and excellent user-friendliness. All analysis functions are explained using easily comprehensible symbols. Tool tips additionally provide explanations of each function by mouseover. This assistance simplifies image processing and allows intuitive operation. A fully functional version of the PC software IRSoft is included with all Testo thermal imagers.

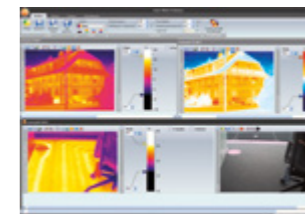**IRSoft – precise analysis of thermal images**
IRSoft enables users to conveniently process and analyse infrared images on a PC. Extensive functions are available for professional image analysis. For example, the different emission levels of various materials can be corrected afterwards for image areas, right up to individual pixels. The histogram function shows the temperature distribution of an image area. Up to five profile lines can be used to analyse the temperature curves. In order to visualise critical temperatures in an image, limit value violations as well as pixels in a specific temperature range can be emphasised. In addition, unlimited measurement points can be set, hot/cold spots determined and comments on the analysis made.

IRSoft – everything important at a glance
Several infrared images can be opened and analysed in parallel. All analyses in the images are visible at a glance and can be compared. Settings can be adjusted for either the entire infrared image or individual image sections. It is also possible to transfer current image corrections to all open infrared images with a mouse click.

Easy creation of professional thermography reports
Infrared and real images are displayed in the screen during the analysis and automatically transferred into the report. This makes it possible to simply and professionally document the measurement results.
The report assistant guides you step by step to a complete and clear report. Different templates are available for both short, quick reports and more comprehensive documentation. The templates contain all the relevant information on the measuring location, measuring task and inspection results. In addition, the report designer can be used to create user-defined templates for individual reports.

Simultaneous evaluation and comparison of several images
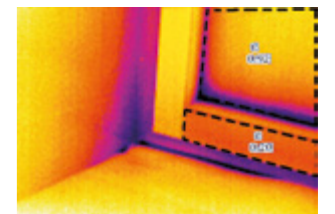
Change the emissivity of certain areas, for precise temperature analysis

Multi-page reports for complete documentation

With IRSoft from Testo:

- analyse thermal images precisely

- create professional thermography reports quickly and easily

- analyse and compare several images simultaneously

Fever detection and disease prevention
using testo 890 thermal imaging camera.

In times of increasing mobility, infections don't stop at national borders either. Whether ebola, SARS, swine flu or COVID-19: no-one wants to imagine the consequences of an epidemic or even a pandemic. That's why it's in the interest of public health to identify risk individuals in large groups of people early. The operators of heavily frequented facilities such as airports, shopping malls or sports stadiums carry a special responsibility for disease prevention.

Why fever measurement with thermography?

An important indicator for an infection is increased body temperature (compared to other people in the immediate surroundings), generally known as fever.

Thermography is the ideal method for scanning not just individuals, but also large flows of people. To do this, the temperature at the inner corner of the eye is measured, and an alarm triggered if it deviates. This allows persons with increased body temperature to be identified quickly and reliably, and to be isolated for more exact testing.

Why testo thermal imagers for fever measurement?

With the **testo FeverDetection assistant**, the testo 890 thermal imaging camera is perfect for identifying potential illness:

- Reliable: up to 1280 x 960 pixels resolution (with testo SuperResolution) and good thermal sensitivity
- Flexible: thanks to an HDMI interface for data transfer to an external screen, they can also be used in semi-stationary applications such as security checks
- Easy: can be used by the most diverse staff, thanks to high level of user convenience

Overview of Testo thermal imaging cameras

Features	testo 865s	testo 868s	testo 871s	testo 872s	testo 883	testo 890
Infrared resolution (pixels)	160 x 120	160 x 120	240 x 180	320 x 240	320 x 240	640 x 480
SuperResolution technology (in pixels)	to 320 x 240	to 320 x 240	to 480 x 360	to 640 x 480	to 640 x 480	to 1280 x 960
Thermal sensitivity (NETD)	100 mK	100 mK	< 80 mK	< 50 mK	< 40 mK	< 40 mK at +30 °C
Measuring range	-20 to +280 °C	-30 to +100 °C 0 to +650 °C	-30 to +100 °C 0 to +650 °C	-30 to +100 °C 0 to +650 °C	-30 +650 °C	-30 to +100 °C / 0 to +350 °C
Image refresh rate	9 Hz	9 Hz	9 Hz	9 Hz	27 Hz 1)	33 Hz*
Standard lens: FOV IFOV$_{geo}$ / IFOV$_{geo-SR}$	31° x 23° 3.4 mrad	31° x 23° 3.4 mrad	35° x 26° 2.6 mrad	42° x 30° 1.3 mrad		42° x 32° / 0.1 m
Optional Lenses	X	X	X	X	✔	✔
Focusing	Fixed focus	Fixed focus	Fixed focus	Fixed focus	Manual	Auto/Manual
High temperature measurement (+650°C)	X	✔	✔	✔	✔	+1200° option
Centre point measurement	✔	✔	✔	✔	✔	✔
Auto Hot/Cold Spot Recognition	✔	✔	✔	✔	✔	✔
Min/max on area calculation	X	X	X	✔	✔	(optional)
Isotherm functions	X	X	X	X	✔	✔
Alarm value function	–X	X	X	X	✔	✔
Display of surface moisture distribution via manual input	X	X	✔	✔	✔	✔
Humidity measurement with wireless humidity probe	X	X	✔	✔	✔	(optional)
Solar mode	X	X	✔	✔	✔	✔
Voice recording	X	X	X	X		✔
Save JPEG function	✔	✔	✔	✔	✔	✔
Integrated digital camera	X	✔	✔	✔	✔	✔
Laser	X	X	X	Laser marker	Laser marker	Laser marker
IFOV warner	✔	✔	✔	✔	✔	X
testo Thermography App	X	✔	✔	✔	✔	X
testo ScaleAssist	✔	✔	✔	✔		✔
testo ε-Assist	X	✔	✔	✔	✔	X
testo FeverDetection assistant	X	X	X	X	X	✔

testo 865s thermal imaging camera

The testo 865s thermal imager is the ideal entry into the world of thermography. It stands out thanks to the best image quality in its class and handy operation, is robust enough to withstand tough daily use, and has useful functions for even better thermal images.

All this at a ground-breaking price-performance ratio. Switch on, aim, know more.

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

100 mK thermal sensitivity

31° x 23° field of view lens

Hot spot /cold spot recognition

Applications

- General testing of heating systems
- Preventative industrial maintenance

NEW

testo 865s

Thermal imager testo 865s with integrated testo SuperResolution, USB cable, mains unit, Lithium ion rechargeable battery, pro software, quick-start guide, short instructions, calibration certificate and case

Order no. 0560 8651

SUPER
RESOLUTION
4XMORE
MEASUREMENT VALUES

Technical Data

Infrared image output	
Infrared resolution	160 x 120 pixels
Thermal sensitivity (NETD)	100 mK
Field of view/min. focusing distance	31° x 23° / < 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
Image presentation	
Image display	8.9 cm (3.5") TFT, QVGA (320 x 240 pixels)
Display options	IR image
Colour palettes	iron, rainbow HC, cold-hot, grey
Data interfaces	
USB 2.0 Micro B	included
Measurement	
Measuring range	-20 to +280 °C
Accuracy	±2 °C, ±2 % of measured value
Emissivity / reflected temperature compensation	0.01 to 1 / manual
Measurement functions	
Analysis functions	Mean point measurement, hot/cold-spot recognition, Delta T,
testo ScaleAssist	included
IFOV warner	included

Imager equipment	
Lens	31° x 23°
Video streaming	via USB
Storage as JPG	included
Fullscreen mode	included
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	included
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	
EU directive	2014/30/EU

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
Holster case	0554 7808

Be sure. testo

testo 868s thermal imaging camera

Thermography connected – with the testo 868s thermal imaging camera. 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 wirelessly integrates measurement values, 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.

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

100 mK thermal sensitivity

31° x 23° field of view lens

Hot spot /cold spot recognition

Free App connection via WiFi

Applications
- Testing of heating systems
- Preventative industrial maintenance

testo 868s

Thermal imager testo 868s 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 8684

SUPER RESOLUTION
4X MORE MEASUREMENT VALUES

Technical Data

Infrared image output	
Infrared resolution	160 x 120 pixels
Thermal sensitivity (NETD)	100 mK
Field of view/min. focusing distance	31° x 23° / < 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 5 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	included

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,
testo ScaleAssist	included
IFOV warner	included

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	Li-ion battery can be changed on-site
Operating time	4 hours
Charging options	In instrument/in charging station (optional)
Mains operation	included

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

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
Pack of 10 x testo ε-markers for use with ε-Assist function (868/871/872 only)	0554 0872
Holster case	0554 7808

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

testo 871s thermal imaging camera

The testo 871s thermal imager offers a high-quality 240 x 180 pixel detector, connectivity via the testo Thermography App, as well as the innovative functions testo ScaleAssist and testo ε-Assist, which enables objectively comparable and error-free thermal images to be recorded. For even more meaningful thermal images, the testo 871s thermal imager also integrates the measurement values of the clamp probe testo 770-3 as well as the thermohygrometer testo 605i via a Bluetooth connection (both available as an option).

- 240 x 180 pixel resolution (with testo SuperResolution 480 x 360 pixels)
- 80 mK thermal sensitivity
- 35° x 26° field of view lens
- Hot spot /cold spot recognition
- Free App connection via WiFi
- Bluetooth connectivity to testo 770-3 / testo 605i
- Laser marker

NEW

Applications

- Electrical thermography
- Buildings thermography
- Preventative industrial maintenance

testo 871s

Thermal imager testo 871s 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 8716

SUPER RESOLUTION
4X MORE MEASUREMENT VALUES

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

Compatible measuring instruments

	Order no.
testo 605i thermohygrometer • Measurement of air humidity and air temperature to identify mould risk • Transmission of measurement values to the testo 871s via Bluetooth	0560 1605
testo 770-3 clamp meter including batteries and measuring cables • Auto AC/DC and large two-line display • Transmission of measurement values to the testo 871s thermal imager via Bluetooth	0590 7703

Technical Data

Infrared image output	
Infrared resolution	240 x 180 pixels
Thermal sensitivity (NETD)	80 mK
Field of view/min. focusing distance	35° x 26° / < 0.5 m
Geometric resolution (IFOV)	2.6 mrad
testo SuperResolution (Pixel/IFOV)	480 x 360 pixels 1.6 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 5 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
Bluetooth[1]	Measurement value transfer from thermohygrometer testo 605i, clamp meter testo 770-3 (optional)
USB 2.0 Micro B	included

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,
testo ScaleAssist	included
IFOV warner	included
Humidity mode – manual	included
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	included
Lens	35° x 26°
Video streaming	via USB, via wireless LAN with testo Thermography App
Storage as JPG	included
Fullscreen mode	included

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	included

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

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
Pack of 10 x testo ε-markers for use with ε-Assist function (868/871/872 only	0554 0872
Holster case	0554 7808

testo 872s thermal imaging camera

The testo 872s thermal imager stands out thanks to its resolution of 320 x 240 pixels, an excellent thermal sensitivity of 50mK, numerous innovative functions, smartphone connection via the testo Thermography App and the best price-performance ratio of its class.

- 320 x 240 pixel resolution (with testo SuperResolution 640 x 480 pixels)
- 50 mK thermal sensitivity
- 42° x 30° field of view lens
- Hot spot /cold spot recognition / delta-T
- Free App connection via WiFi
- Bluetooth connectivity to free testo 605i and testo 750-3 (optional extra)
- Laser marker

NEW

Applications

- Visualisation of mould risk
- Detection of structural defects and construction quality
- Building / energy surveys
- Preventative industrial maintenance

testo 872s

Thermal imager testo 872s 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 8725

SUPER RESOLUTION 4X MORE MEASUREMENT VALUES

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

Compatible measuring instrument

testo 770-3 clamp meter

- Auto AC/DC and large two-line display
- Transmission of measurement values to the testo 871 thermal imager via Bluetooth
- Additional output, current and voltage values enable better interpretation of measured temperatures
- Includes battery and measuring cable

	Order no.
	0590 7703

Technical Data

Infrared image output	
Infrared resolution	320 x 240 pixels
Thermal sensitivity (NETD)	50 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 5 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	included

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	included
IFOV warner	included
Humidity mode – manual	included
Humidity measurement with humidity measuring instrument[1]	Automatic measurement value transfer of thermohygrometer testo 605i via Bluetooth (instrument included)
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	included
Lens	42° x 30°
Laser[2]	Laser class 2
Video streaming	via USB, via wireless LAN with testo Thermography App
Storage as JPG	included
Fullscreen mode	included

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	included

Ambient conditions	
Operating temperature	-15 to +50 °C
Storage temperature	-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

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
Pack of 10 x testo ε-markers for use with ε-Assist function (868/871/872 only	0554 0872
Holster case	0554 7808

testo 883 thermal imaging camera

Developed for service engineers, facility managers and building energy consultants: The testo 883 thermal imager is a reliable partner when carrying out your thermal measuring tasks. Its outstanding thermal image quality and useful features will enable you to save time and ensure perfect work results. An infrared resolution of 320 x 240 pixels, expandable to 640 x 480 pixels with testo SuperResolution technology. Engineers also have full control over the thermal image thanks to the manual focus function.

- 320 x 240 pixel resolution (with testo SuperResolution 640 x 480 pixels)
- 40 mK thermal sensitivity
- Manual focus
- Hot spot /cold spot recognition / delta-T
- Free App connection via WiFi
- Bluetooth connectivity to free testo 605i and testo 750-3 (optional extra)
- Laser marker

Compatible measuring instruments

	Order no.
testo 605i thermohygrometer • Measurement of air humidity and air temperature to identify mould risk • Transmission of measurement values to the testo 883 via Bluetooth	0560 1605
testo 770-3 clamp meter including batteries and measuring cables • Auto AC/DC and large two-line display • Transmission of measurement values to the testo 883 thermal imager via Bluetooth	0590 7703

testo 883

testo 883 thermal imager with standard lens 30° x 23°, USB-C cable, USB mains unit, Li-ion rechargeable battery, carrying strap, Bluetooth® headset, short instructions, calibration protocol, professional software IRSoft (free download), in a hard carry case
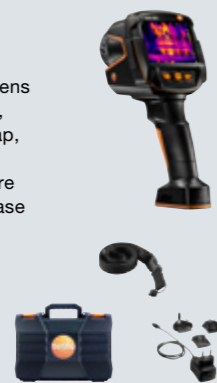
Order no. 0560 8830

testo 883 kit

testo 883 thermal imager with standard lens 30° x 23°, telephoto lens 12° x 9°, USB-C cable, USB mains unit, Li-ion rechargeable battery, spare battery, battery-charging station with USB cable, carrying strap, Bluetooth® headset, short instructions, calibration protocol, professional software IRSoft (free download), in a hard carry case

Order no. 0563 8830

Technical Data

Infrared image output	
Infrared resolution	320 x 240 pixels
Thermal sensitivity (NETD)	< 40 mK
Field of view/min. focusing distance	30° x 23° (standard lens) 12° x 9° (telephoto lens) < 0.1 m (standard lens)
Geometric resolution (IFOV)	1.7 mrad (standard lens) 0.7 mrad (telephoto lens)
testo SuperResolution (pixels/IFOV)	640 x 480 pixels 1.3 mrad
Image refresh rate	27 Hz [1]
Focus	Manual
Spectral range	7.5 to 14 µm

Visual image output	
Image size / min. focusing distance	3 MP / < 0.4 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, humidity palette

Data interface	
WLAN Connectivity	Communication with the testo Thermography App; Wireless module BT[2]/WLAN
Bluetooth[2]	Headset for voice annotations; transfer of readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional)
USB	USB-C, USB 2.0

Measurement	
Measuring range	-30 to +650 °C
Accuracy	±2 °C, ±2% of the reading (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	Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area), alarms, isotherm
testo SiteRecognition	4
testo ScaleAssist	4
IFOV warner	4
Humidity mode – manual	4
Humidity measurement with humidity measuring instrument[2]	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[2]	Automatic data transfer of testo 770-3 clamp meter via Bluetooth (instrument must be ordered separately)

Imager features	
Touch operation	capacitive touch display
Digital camera	4
Laser [3]	Laser marker (laser class 2, 635 nm)
Video streaming	via USB, via WLAN with testo Thermography App
Storage as JPG	4
Fullscreen mode	4
Tripod socket	for wrist strap or a photo tripod with UNC thread

Image storage	
File format	.bmt and .jpg; export options in .bmp, .jpg, .png, .csv, .xls
Memory	internal memory (2.8 GB)

Voice annotation	
	4 [2]

Power supply	
Battery type	Fast-charging, Li-ion battery can be changed on site
Operating time	≥ 5 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, non-condensing
Housing protection class (IEC 60529)	IP54
Vibration (IEC 60068-2-6)	2G

Physical features	
Weight	827 g
Dimensions (LxWxH)	171 x 95 x 236 mm
Housing	PC - ABS

PC software	
System requirements	Windows 10, Windows 8, Windows 7

Standards, tests	
EU guidelines	EMC: 2014/30/EU RED: 2014/53/EU WEEE: 2012/19/EU RoHS: 2011/65/EU + 2015/863 REACH: 1907/2006

[1] Inside the EU, outside 9 Hz
[2] An overview of radio authorizations in the different countries can be found in the download section of the respective product page (www.testo.com).
[3] excepting USA, China and Japan

testo 890 thermal imaging camera

The Testo 890 thermal imaging camera is the top of the range model and is available in a number of different configurations. It comes in a flexible camcorder design with rotatable handle and fold-out display, a high resolution detector with a temperature resolution of < 40 mK, lens options include a 42 ° wide angle lens and a 15 ° telephoto lens. The unit has an integrated digital camera with power LEDs and speech recording using headset for complete professional thermography. Available with the option of SuperResolution technology which improves the image quality to 1280 x 960 pixels.

°C

testo FeverDetection function for identifying increased surface temperatures on faces

Infrared resolution 640 x 480 pixels

Very good thermal sensitivity of < 40 mK (< 0.04 °C)

Optical and audible alarms

HDMI interface for transmission to an external monitor

testo 890 + 1 lens (selectable)

The testo 890 thermal imager is equipped for both for professional industrial thermography and for building thermography. This kit includes the testo 890 thermal imager 1 lens of your choice.

Order no. 0563 0890 X1

testo 890 + 2 lenses (selectable)

The testo 890 thermal imager is equipped for both for professional industrial thermography and for building thermography. This kit includes the testo 890 thermal imager 2 lenses of your choice.

Order no. 0563 0890 X2

testo 890 + 3 lenses (selectable)

The testo 890 thermal imager is equipped for both for professional industrial thermography and for building thermography. This kit includes the testo 890 thermal imager 3 lenses of your choice.

Order no. 0563 0890 X3

testo 890 + SuperTele lens

This thermography kit provides the ideal equipment for capturing images from long distances and other applications. This kit includes the testo 890 thermal imager with super-telephoto lens

Order no. 0563 0890 X4

testo 890 SuperTele lens + 1 lens

This thermography kit provides the ideal equipment for capturing images from long distances and other applications. This kit includes the testo 890 thermal imager with super-telephoto lens + 1 lens of your choice.

Order no. 0563 0890 X5

testo 890 SuperTele lens + 2 lenses

A thermography kit for all eventualities: along with the testo 890 professional thermal imager, you also get three lenses. This means you are equipped for every measuring distance.

Order no. 0563 0890 X6

testo 890 FeverDetection kit

Detect body surface temperatures of individuals in very busy facilities such as airports, train stations or shopping centres quickly and reliably: high image quality, HDMI output and the ingenious FeverDetection feature.

Order no. 0563 0890 X7

Technical Data

Infrared image output	
Infrared resolution	640 x 480 pixels
Thermal sensitivity (NETD)	< 40 mK at +30 °C
Field of view / min. focusing distance	42° x 32° / 0.1 m
Geometric resolution (IFOV)	1.13 mrad
Image refresh rate	33 Hz*
Focus	Automatic/manual
Spectral range	7.5 to 14 µm
Visual image output	
Image size / min. focusing distance	3.1 MP / 0.5 m
Image presentation	
Image display	4.3" LCD touchscreen with 480 x 272 pixels
Digital zoom	1 to 3 x
Display options	IR image / real image
Video output	USB 2.0, Micro HDMI
Colour palettes	9 (iron, rainbow, rainbow HC, cold-hot, blue-red, grey, inverted grey, sepia, Testo)
Measurement	
Measuring range	-30 to +100 °C / 0 to +350 °C (switchable)
Accuracy	±2 °C, ±2 % of reading (higher value applies) (±3°C of m.v. at -30 to -22°C)
Emissivity/reflected temperature settings	0.01 to 1 / manual
Transmission correction (atmosphere)	4

*   Inside the EU, outside 9 Hz
** Excepting USA, China and Japan
*** Bluetooth only in the EU, Norway, Switzerland, USA, Canada, Colombia, Turkey, Japan, Russia, Ukraine, India, Australia

Imager equipment	
Digital camera	4
Lens	42° x 32°
Laser (laser classification 635 nm, Class 2)**	Laser marker (not available when FeverDetection is activated)
Voice recording	Bluetooth*** / wired headset
testo FeverDetection	4
Image storage	
File format individual image	.bmt; export options in .bmp, .jpg, .png, .csv, .xls
Removable storage device	SD card 2 GB (approx. 1,500 to 2,000 images)
Power supply	
Battery type	Fast-charging, Li-ion battery can be changed on-site
Operating time	4.5 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, non-condensing
Housing protection class (IEC 60529)	IP54
Vibration (IEC 60068-2-6)	2G
Physical features	
Weight	1630 g
Dimensions (L x W x H)	253 x 132 x 111 mm
Tripod mounting	1/4" - 20 UNC
Housing	ABS
PC software	
System requirements	Windows 10, Windows Vista, Windows 7 (Service Pack 1), Windows 8, USB 2.0 interface
Standards, tests	
EU Directive	2004 / 108 / EC
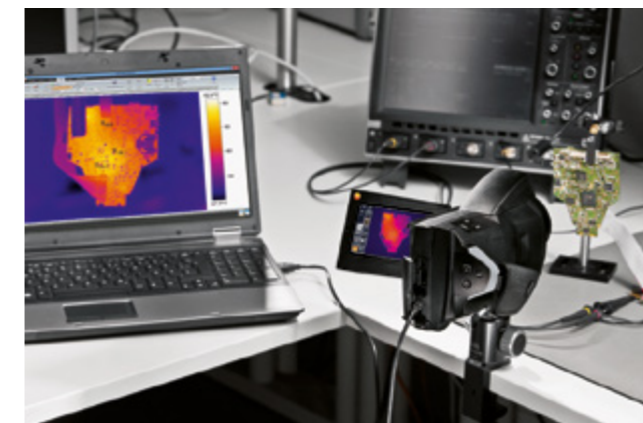
Subject to change, including technical modifications.