

Be sure. **testo**



**NEW!**

# Next level thermography.

The new thermal imagers testo 865s/868s/871s/872s  
impress with the best image quality in their class.

# Committed to innovation.

For over 15 years, we have been developing and manufacturing thermal imagers in Germany for a wide range of requirements. Our latest four imagers offer the right model for every application. They are not only innovative, well thought-out and easy to operate - but also impress with the best image quality in their class.

## The top features of the new thermal imagers:

- + Informative thermal images:**  
High resolution and very good NETD
- + Smart and networked:**  
Connection of radio probes and testo Thermography App
- + Intuitive operation:**  
modern tile optics and quick select button



Only one of many functions: Networked and efficient thermal imaging with the **testo Thermography App**.

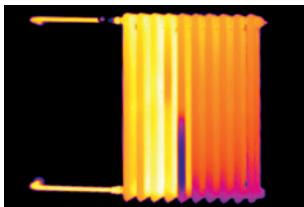




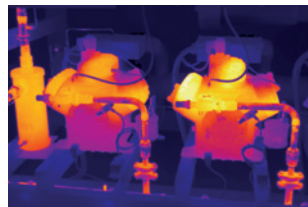
# This is why you too need a thermal imager.

In contracting as well as in the industrial sector, you profit considerably from the use of a thermal imager:

- You carry out status-oriented servicing work and prevent expensive system downtimes.
- You overcome the limitations of a pyrometer by measuring not just individual points but whole areas.
- You deal with jobs such as leakage detection or tests on plants and building sections more quickly than before, thus saving time and money.
- You always provide best quality and ensure the satisfaction of your customers – for example by testing and impressively presenting the faultless fitting of insulation or the functionality of a heating system.
- You win new customers with your professional appearance, supported by a thermal imager.



**Ensure function and quality:** Identify faults in radiators at a glance.



**Save time and resources:** Localize anomalies and leakages on pipelines.



**Maintaining plants:** Identify excessively high temperatures in circuit breakers and electrical components before breakdowns can occur.



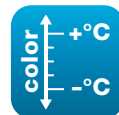
**Detect energy losses from buildings:** immediately identify and record thermal bridges in building fronts or shells.

## Convincing features for efficient thermography.



### High resolution and image quality

Up to 320 x 240 pixels – and with **testo SuperResolution** even 640 x 480 pixels. Image quality and resolution are ideal for all applications in contracting and industry.



### Objectively comparable images

**testo ScaleAssist** adapts the thermal image scale to the inner and outer temperatures of the measurement object, and the difference between them. This ensures comparable and error-free thermal images of the thermal insulation behaviour of a building.



### Display of the measuring spot size

The **IFOV warmer** illustrates which measurement object can be correctly and precisely measured at which distance. This ensures that surrounding objects do not falsify the surface temperature of the targeted target.



### Connection to App and other Testo measuring instruments.

Create and send compact reports on site with the **testo Thermography App**. Transfer the measurement values of the testo 605i hygrometer and the clamp meter testo 770 wirelessly to the thermal imagers, in order to identify mould danger or to complement thermal images with current/voltage values.

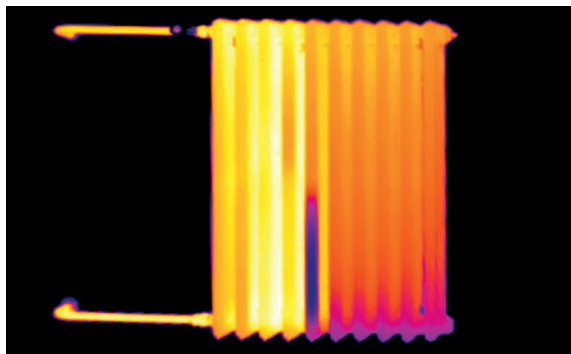


## The right model **for every requirement.**

### testo 865s

Switch on, point, know more.

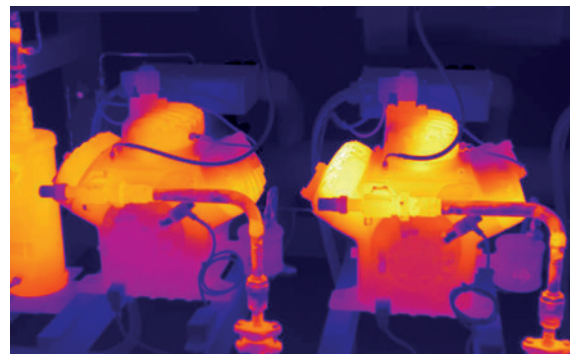
With 160 x 120 pixels, your ideal entry into thermography: Visualize temperature differences from 0.10 °C, and automatically recognize hot-cold spots.



### testo 868s

Smart and networked thermal imaging.

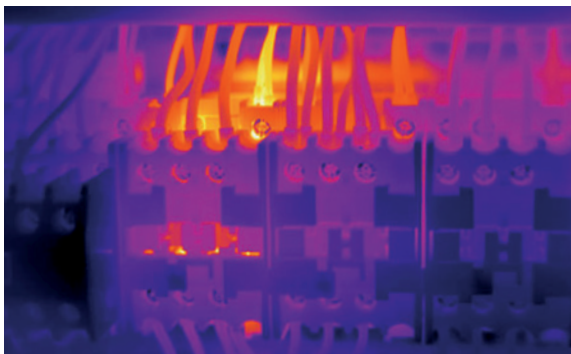
Integrated digital camera and 160 x 120 pixel thermal images in which temperature differences of 0.08 °C are visible. Incl. thermography App in order to work more flexibly and send reports on site.



### testo 871s

Smart thermography for professional requirements.

Resolution: 240 x 180 pixels, identify temperature differences from 0.08 °C. Incl. digital camera and testo Thermography App. Integrates measurement values from the thermohygrometer testo 605i and the clamp meter testo 770-3.



### testo 872s

Smart thermography with optimum image quality.

Professional thermal imager with 320 x 240 pixels, digital camera, laser marker and the certainty of knowing you can identify temperature differences from 0.05 °C. Integrates measurement values from the thermohygrometer testo 605i and the clamp meter testo 770-3.



# Precise thermal images are easy with these **functions**.

## **testo ScaleAssist:**

### Comparable thermal images

With testo ScaleAssist, the correct evaluation of construction errors and thermal bridges is easier than ever before. The function automatically sets the optimum thermal image scale. This prevents interpretation errors which can be caused by a false evaluation of the scaling. Undesired

extreme temperatures are automatically filtered out of the image, and are only represented as such when they really are present. This makes infrared images comparable in spite of altered ambient conditions. This is of great significance in before-and-after images, for example.

Without **testo ScaleAssist**



With **testo ScaleAssist**



**IFOV warner:** You always know what can be measured precisely from a certain distance.

## **testo $\epsilon$ -Assist:**

### Set emissivity automatically

For precise thermal images, it is important to set the emissivity ( $\epsilon$ ) and the reflected temperature (RTC) of the object being examined in the imager. Previously, this was complicated, and with regard to the reflected temperature, less than accurate. testo  $\epsilon$ -Assist changes all that:

Simply attach one of the reference stickers ( $\epsilon$ -markers) 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.

Attach **testo  $\epsilon$ -marker** and record the object with the digital camera in the thermal imager.

**$\epsilon$  and RTC** are automatically determined.

Precise **thermography** of object.





## Work **smart** and networked.

### The **testo Thermography App**

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 for 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 transmit thermal images live to your smartphone/tablet, and can use it as a second display – for example for your customers.

**testo Thermography App** for testo 868s/871s/872s

Download now for iOS or Android free of charge:



### Connectivity with **testo 605i and testo 770-3**

The thermal imagers testo 871s/872s can be connected wirelessly with 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.

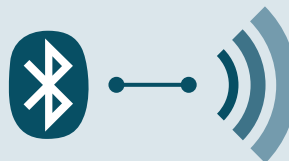


#### **Clamp meter testo 770-3**

- Easy to operate thanks to the fully retractable pincer arm
- Auto AC/DC and large two-line display
- Improved TRMS method

#### **Thermohygrometer testo 605i**

- Compact professional measuring instrument from the Testo Smart Probes series
- Measures air temperature and relative humidity
- Space-saving and easy to transport



#### **Thermal imager testo 871s/872s**



# The thermal imagers in comparison.



	testo 865s	testo 868s	testo 871s	testo 872s
<b>Infrared resolution</b>	160 x 120 pixels (with testo SuperResolution 320 x 240 pixels)	160 x 120 pixels (with testo SuperResolution 320 x 240 pixels)	240 x 180 pixels (with testo SuperResolution 480 x 360 pixels)	320 x 240 pixels (with testo SuperResolution 640 x 480 pixels)
<b>Thermal sensitivity (NETD)</b>	<0.10 °C (100 mK)	<0.08 °C (80 mK)	<0.08 °C (80 mK)	<0.05 °C (50 mK)
<b>Measuring range</b>	-20 to +280 °C	-30 to +650 °C	-30 to +650 °C	-30 to +650 °C
<b>Field Of View (FOV)</b>	31° x 23°	31° x 23°	35° x 26°	42° x 30°
<b>App connection via wireless LAN</b>	–	✓	✓	✓
<b>Integrated 5 MP digital camera</b>	–	✓	✓	✓
<b>IFOV warner</b>	✓	✓	✓	✓
<b>testo ScaleAssist</b>	✓	✓	✓	✓
<b>Humidity mode</b> Evaluate mould risk with traffic-light scale	–	–	✓	✓
<b>testo ε-Assist</b>	–	✓	✓	✓
<b>Connection of testo 605i and testo 770-3 via Bluetooth</b>	–	–	✓	✓
<b>PC software testo IRSofT</b> Free, licence-free software for comprehensive analysis and reporting	✓	✓	✓	✓
<b>Laser marker</b>	–	–	–	✓

## Thermal imagers from Testo.

Ever since Testo was established in 1957, the company has gained experience in temperature measurement – which forms the basis of thermography. In 2007 we launched the first thermal imager developed entirely in Germany on the market. Ever since then, our thermal imagers have been manufactured exclusively in Germany – this enables us to maintain the consistent and very high quality of the instruments.

At our site in Titisee, Baden-Württemberg, highly-qualified staff are working on developing practical functions and new technologies for the thermal imagers of the future. Our developers and product managers always work together with practical experts such as heating engineers, electricians, building contractors, service engineers and facility managers. Because being aware of the exact requirements of our target groups is the only way to ensure that we develop thermal imagers which enable you to view your systems and processes in a whole new light.

## Models and accessories.

**testo 865s**

testo 865s thermal imager with integrated testo SuperResolution technology, USB cable, mains unit, lithium-ion rechargeable battery, professional software (free download), commissioning instructions, calibration protocol and case

Order no. 0560 8651

**testo 868s**

testo 868s thermal imager with integrated testo SuperResolution technology, radio module 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 8684

**testo 871s**

testo 871s 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 8716

**testo 872s**

testo 872s 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 8725



Accessories	Description	Order no.	
<b>Spare rechargeable battery</b>	Additional lithium-ion rechargeable battery for extending the operating time.	0554 8721	
<b>Battery-charging station</b>	Table charging station for optimising the charge time.	0554 1103	
<b>testo ε-markers</b>	Ten markers for the testo ε-Assist function for the automatic determination of emissivity and reflected temperature.	0554 0872	
<b>Holster case</b>		0554 7808	
<b>testo Thermography App</b>	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. <b>Download for Android or iOS now free of charge.</b>		 

## Compatible measuring instruments for more meaningful thermal images

**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 871s and testo 872s thermal imagers via Bluetooth and detection of mould-risk areas with traffic-light principle

Order no. 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 imagers testo 871s and testo 871 via Bluetooth

Order no. 0590 7703

