

Test Equipment Depot - 800.517.8431 - 5 Commonwealth Ave, MA 01801 - TestEquipmentDepot.com

# Thermal imager

testo 868s - smart and networked thermography.

Infrared resolution 160 x 120 pixels with testo SuperResolution technology 320 × 240 pixels

Thermal sensitivity (NETD) of < 0.14 °F (0.08 °C) (80 mK)

testo Thermography App for on-site analysis and report generation

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



Thermography connected – with the testo 868s thermal imager. It has the best thermal image quality in its class, an integrated digital camera, and stands out thanks to smart new features with intuitive operation in a modern tile look.

The testo Thermography App turns 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.



### Ordering data

#### testo 868s

testo 868s thermal imager with integrated testo SuperResolution technology, Wi-Fi radio module, USB cable, power supply, lithium-ion rechargeable battery, professional software (free download), 3 x testo  $\epsilon$ -markers, commissioning instructions, certificate of calibration, and case

Order no. 0560 8684



#### 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 |

#### 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 with ScaleAssist



## Technical data

| Infrared image output   |  |
|---|--|
| Infrared resolution   | 160 x 120 pixels   |
| Thermal sensitivity (NETD)  | < 0.14 °F (0.08 °C) (80 mK)  |
| Field of view/min.  | 31° x 23° /  |
| focusing distance   | < 1.6 ft (0.5 m)   |
| Geometric resolution (IFOV)   | 3.4 mrad   |
| testo SuperResolution   | 320 x 240 pixels   |
| (pixels/IFOV)   | 2.1 mrad   |
| Image refresh rate  | 9 Hz   |
| Focus   | Fixed focus  |
| Spectral range  | 7.5 to 14 µm   |
| Visual image output   |  |
| Image size / min.   | 5 MP /   |
| focusing distance   | min. 1.6 ft (0.5 m)  |
| Image presentation  |  |
| Image display   | 3.5 in (8.9 cm) TFT, QVGA  |
| Display options   | IR image / real image  |
| Color palettes  | iron, rainbow HC, cold-hot, grey   |
| Data interface  |  |
| Wi-Fi Connectivity  | Communication with the testo Thermography App Wireless module Wi-Fi (EU, EFTA, USA, AUS, CDN, TR)  |
| USB 2.0 micro B   |  |
|   | V  |
| Measurement   | V  |
|   | 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   |
| Measurement   | -22 to 212°F (-30 to +100 °C)<br>Measuring range 2:<br>0 to 1,202 °F (0 to +650 °C)  |
| Measurement Measuring ranges  | -22 to 212°F (-30 to +100 °C)  Measuring range 2: 0 to 1,202 °F (0 to +650 °C)  Manual/automatic switchover  ±3.6 °F (±2 °C), ±2 % of measured value   |
| Measurement Measuring ranges  Accuracy  Emissivity/reflected  | -22 to 212°F (-30 to +100 °C)  Measuring range 2: 0 to 1,202 °F (0 to +650 °C)  Manual/automatic switchover  ±3.6 °F (±2 °C), ±2 % of measured value (higher value applies)  0.01 to 1 / manual  Automatic recognition of emissivity and   |
| Measurement Measuring ranges  Accuracy  Emissivity/reflected temperature adjustment                                     | -22 to 212°F (-30 to +100 °C)  Measuring range 2: 0 to 1,202 °F (0 to +650 °C)  Manual/automatic switchover  ±3.6 °F (±2 °C), ±2 % of measured value (higher value applies)  0.01 to 1 / manual  Automatic recognition of emissivity and   |
| Measurement  Measuring ranges  Accuracy  Emissivity/reflected temperature adjustment testo ε-Assist                     | -22 to 212°F (-30 to +100 °C)  Measuring range 2: 0 to 1,202 °F (0 to +650 °C)  Manual/automatic switchover  ±3.6 °F (±2 °C), ±2 % of measured value (higher value applies)  0.01 to 1 / manual  Automatic recognition of emissivity and   |
| Measurement Measuring ranges  Accuracy  Emissivity/reflected temperature adjustment testo ε-Assist  Measuring functions | -22 to 212°F (-30 to +100 °C)  Measuring range 2: 0 to 1,202 °F (0 to +650 °C)  Manual/automatic switchover  ±3.6 °F (±2 °C), ±2 % of measured value (higher value applies)  0.01 to 1 / manual  Automatic recognition of emissivity and determination of reflected temperature (RTC)  Centre point measurement, hot/cold spot |

| Imager features                      |   |  |
|--------------------------------------|---|--|
| Digital camera                       | V   |  |
| Lens                                 | 31° x 23°   |  |
| Video streaming                      | via USB   |  |
|                                      | via Wi-Fi with testo Thermography App                           |  |
| Storage as JPG                       | <b>✓</b>  |  |
| Fullscreen mode                      | <b>✓</b>  |  |
| Image storage                        |   |  |
| File format                          | .bmt and .jpg; export options in .bmp, .jpg<br>.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                | V   |  |
| 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<br>(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<br>RED: 2014/53/EU                              |  |