testo 883



# Thermal imager

Your helping hand: The testo 883 thermal imager.

Best image quality: IR resolution of 320 x 240 pixels (with SuperResolution 640 x 480 pixels); NETD < 40 mK

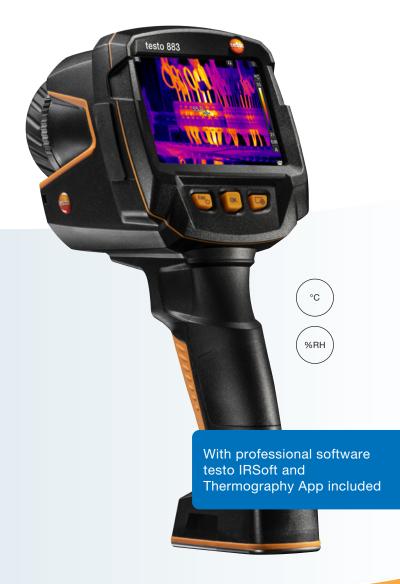
Helpful features: testo SiteRecognition intelligent image management and testo ScaleAssist automatic contrast adjustment

Extensive analysis and documentation:

With the intuitive professional software testo IRSoft

Full control: Manual focus and interchangeable lenses

Wireless transmission: Integrate readings from clamp meter or humidity probe directly into the thermal image



The testo 883 thermal imager was developed especially for power distribution utilities, preventive & predictive maintenance staff, facility managers and building energy consultants who wish to rely on the best thermal image quality and helpful features for their thermal measuring tasks. This saves time and ensures flawless work results. In facility management and maintenance, testo SiteRecognition technology really pays off. This feature automatically assigns thermal images (e.g. of switching

cabinets) to the correct measurement object, thuseliminating the need for tedious manual image management.

In building energy consulting, many experts appreciate the professional software testo IRSoft, which is included with the testo 883. With this, not only can thermal images be comprehensively analyzed, they can also be summarized in impressive-looking reports. This reduces the time required and makes it easier to impress customers over the long term.



### Order data

#### 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 (depending on the country), short instructions, calibration protocol, professional software IRSoft (free download), in a 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 (depending on the country), short instructions, calibration protocol, professional software IRSoft (free download), in a case

Order no. 0563 8830



Compatible measuring instruments for more meaningful thermal images	Order no.	
testo 605i thermohygrometer with smartphone operation, including batteries and calibration protocol	0560 2605 02	
testo 770-3 clamp meter including batteries and 1 set of measuring cables	0590 7703	
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 or 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), $\epsilon=0.95,$ temperature-resistant up to +250 °C	0554 0051	
PC software testo IRSoft for analysis and reporting (free 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	

<sup>\*</sup> Please contact our customer service.

#### **PC** software testo IRSoft

With testo IRSoft, you can conveniently process and analyze infrared images on your PC. Extensive investigative functions are available for professional thermal image processing.

The software can be downloaded free of charge from www.testo.com/irsoft.



#### 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.

#### testo SiteRecognition

The testo SiteRecognition technology ensures fully automatic measuring location recognition, along with storage and management of thermal images resulting from measurements or inspections. This saves you a lot of time and stress, particularly if you take a lot of pictures of similar measurement objects.

#### testo ScaleAssist

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 and makes infrared images comparable in spite of altered ambient conditions.



## Technical data

Infrared image output	
Infrared resolution	320 x 240 pixels
Thermal sensitivity (NETD)	< 40 mK/ 0.04 °C at 30 °C
Field of view/min.	30° x 23° (standard lens)
focusing distance	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	640 x 480 pixels
IFOV/spatial resolution	1.3 mrad
Image refresh rate	9 Hz/ 27 Hz <sup>1)</sup>
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,
Colour palettes	blue-red, grey, inverted grey, sepia, Testo iron HT, humidity palette
Data interface	
WLAN Connectivity	Communication with the
	testo Thermography App; Wireless module BT <sup>2</sup> /WLAN
Bluetooth <sup>2)</sup>	Headset for voice annotations; transfer of
	readings from testo 605i thermohygromete 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
, 10001.009	(higher value applies)
Emissivity/reflected temperature adjustment	0.01 to 1 / manual
testo ε-Assist	Automatic recognition of emissivity and
10010 0 7100101	
	determination of reflected temperature (RT
Measuring functions	determination of reflected temperature (RT
Measuring functions	Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area), alarms, isotherm
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
Measuring functions  Analysis functions  testo SiteRecognition	Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area), alarms, isotherm
Measuring functions  Analysis functions  testo SiteRecognition testo ScaleAssist	Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area), alarms, isotherm
Measuring functions  Analysis functions  testo SiteRecognition testo ScaleAssist IFOV warner Humidity mode – manual	Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area), alarms, isotherm
Measuring functions  Analysis functions  testo SiteRecognition testo ScaleAssist  IFOV warner  Humidity mode – manual  Humidity measurement with humidity	Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area), alarms, isotherm  Automatic data transfer of testo 605i thermohygrometer via Bluetooth
Measuring functions  Analysis functions  testo SiteRecognition testo ScaleAssist IFOV warner Humidity mode – manual Humidity measurement with humidity measuring instrument <sup>2)</sup>	determination of reflected temperature (RT)  Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area), alarms, isotherm
Measuring functions  Analysis functions  testo SiteRecognition testo ScaleAssist  IFOV warner  Humidity mode – manual  Humidity measurement with humidity measuring instrument <sup>2)</sup> Solar mode – manual	Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area), alarms, isotherm  Automatic data transfer of testo 605i thermohygrometer via Bluetooth
Measuring functions  Analysis functions  testo SiteRecognition testo ScaleAssist IFOV warner Humidity mode – manual Humidity measurement with humidity measuring instrument <sup>2)</sup>	Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area), alarms, isotherm   Automatic data transfer of testo 605i thermohygrometer via Bluetooth (instrument must be ordered separately)
Measuring functions  Analysis functions  testo SiteRecognition testo ScaleAssist  IFOV warner  Humidity mode – manual  Humidity measurement with humidity measuring instrument <sup>2)</sup> Solar mode – manual  Electrical mode –	Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area), alarms, isotherm   Automatic data transfer of testo 605i thermohygrometer via Bluetooth (instrument must be ordered separately)  Input of solar radiation value

Imager features	
Touch operation	capacitive touch display
Digital camera	V
Laser <sup>3)</sup>	Laser marker (laser class 2, 635 nm)
Video streaming	via USB, via WLAN with testo Thermography App
Storage as JPG	<i>v</i>
Fullscreen mode	<b>V</b>
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*/Text annotation	Available
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	V
Ambient conditions	
Operating temperature range	-15 to +50 °C
Storage temperature range	-30 to +60 °C
Air humidity	10 to 90 %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

<sup>1)</sup> Inside the EU, outside 9 Hz

<sup>&</sup>lt;sup>2)</sup> An overview of radio authorizations in the different countries can be found in the download section of the respective product page (www.testo.com).

<sup>(</sup>www.testo.com).
<sup>3)</sup> excepting USA, China and Japan

<sup>\*</sup>Voice annotation 60 s

