

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



testo 883

With professional software testo IRSoft and Thermography App included



The testo 883 thermal imager was developed especially for 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, thus eliminating 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

Recommendation for **maintenance**: testo 883-1 with standard lens (30°) for smaller measurement objects or testo 883-2 with wide-angle lens (42°) for larger plants.

Recommendation for **building thermography**: testo 883-2 with wide-angle lens (42°) for larger image section and faster and more efficient work.

Use our online IFOV calculator to determine the ideal lens for your needs.

testo 883-1

Thermal imager testo 883-1 with standard lens $30^{\circ} \ x \ 23^{\circ}$

Standard scope of delivery: 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



testo 883-2

Order no. 0560 8836

Thermal imager testo 883-2

with wide-angle lens 42° x 32°

Standard scope of delivery: USB-C cable,

software IRSoft (free download), in a case

USB mains unit, Li-ion rechargeable battery, carrying

strap, Bluetooth® headset (depending on the country),

short instructions, calibration protocol, professional



testo 883-1 kit

Thermal imager testo 883-1 with standard lens 30° x 23° and telephoto lens 12° x 9°

Standard scope of delivery see left. Additionally: Additional battery and battery charging station with USB cable, USB-C cable, USB mains unit, carrying strap, Bluetooth® headset (country-dependent)

Order no. 0563 8830



testo 883-2 kit

Thermal imager testo 883-2 with wide-angle lens 42° x 32° and telephoto lens 12° x 9°

Standard scope of delivery see left.

Additionally: Additional battery and battery charging station with USB cable, USB-C cable, USB mains unit, carrying strap, Bluetooth® headset (country-dependent)

Order no. 0563 8836



Compatible measuring instruments for more meaningful thermal images Order no. 0560 2605 02 testo 605i thermohygrometer with smartphone operation, including batteries and calibration protocol 0590 7703 02 testo 770-3 clamp meter including batteries and 1 set of measuring cables Accessories Order no. Telephoto lens 12° x 9° 0554 8831 Spare battery, additional Li-ion rechargeable battery for extending the operating time. Battery-charging station, desktop charging station for optimizing the charge time. 0554 8801 0554 8805 Lens protection glass. Special germanium protective glass for optimum protection of the lens against dust or scratching testo ϵ -marker (10 off), markers for the testo ϵ -Assist function for the automatic determination of emissivity and 0554 0872 reflected temperature Emission tape. Adhesive tape e.g. for bare surfaces (roll, L.: 10 m, W.: 25 mm), 0554 0051 ε = 0.95, temperature-resistant up to +250 °C 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 * Please contact our customer service.



Technical data

Infrared image output	
Infrared resolution	320 x 240 pixels
Thermal sensitivity	< 40 mK
(NETD)	
Field of view/min.	standard lens: 30° x 23° / < 0.1 m
focusing distance	wideangle lens: 42° x 32° / 0.1 m
O	telephoto lens: 12° x 9° / 0.5 m
Geometric resolution (IFOV)	standard lens: 1.7 mrad wideangle lens: 2.3 mrad
(1.0.1)	telephoto lens: 0.7 mrad
testo SuperResolution	640 x 480 pixels
(pixels/IFOV)	standard lens: 1.1 mrad
	wideangle lens: 1.4 mrad telephoto lens: 0.4 mrad
Image vetweek vete	27 Hz ¹⁾
Image refresh rate	
Focus	Manual
Spectral range	7.5 to 14 μm
Visual image output	
Image size / min. focusing distance	5 MP / < 0.4 m
Image presentation	
	8.9 cm (3.5") TFT, QVGA (320 x 240 pixels)
Image display	2x, 3x, 4x
Digital zoom	IR image / real image / overlay (IRSoft)
Display options	
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
	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional)
USB	readings from testo 605i thermohygrometer,
USB Measurement	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional)
	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional)
Measurement	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0
Measurement Measuring range	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies)
Measurement Measuring range Accuracy Emissivity/reflected	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual
Measurement Measuring range Accuracy Emissivity/reflected	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ε-Assist	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ε-Assist Measuring functions	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and determination of reflected temperature (RTC)
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ε-Assist	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ε-Assist Measuring functions	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and determination of reflected temperature (RTC) Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area),
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ε-Assist Measuring functions Analysis functions	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and determination of reflected temperature (RTC) Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T,
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ε-Assist Measuring functions Analysis functions testo SiteRecognition	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and determination of reflected temperature (RTC) Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area), alarms, isotherm
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ε-Assist Measuring functions Analysis functions	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and determination of reflected temperature (RTC) Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area),
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ε-Assist Measuring functions Analysis functions testo SiteRecognition	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and determination of reflected temperature (RTC) Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area), alarms, isotherm
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ε-Assist Measuring functions Analysis functions testo SiteRecognition testo ScaleAssist	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and determination of reflected temperature (RTC) Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area), alarms, isotherm
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ɛ-Assist Measuring functions Analysis functions testo SiteRecognition testo ScaleAssist IFOV warner Humidity mode – manual Humidity measurement	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and determination of reflected temperature (RTC) 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
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ε-Assist Measuring functions Analysis functions testo SiteRecognition testo ScaleAssist IFOV warner Humidity mode – manual Humidity measurement with humidity	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and determination of reflected temperature (RTC) Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area), alarms, isotherm V V
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ε-Assist Measuring functions Analysis functions testo SiteRecognition testo ScaleAssist IFOV warner Humidity mode – manual Humidity measurement with humidity measuring instrument ²	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and determination of reflected temperature (RTC) 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)
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ε-Assist Measuring functions Analysis functions testo SiteRecognition testo ScaleAssist IFOV warner Humidity mode – manual Humidity measurement with humidity Solar mode – manual	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and determination of reflected temperature (RTC) 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
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ε-Assist Measuring functions Analysis functions testo SiteRecognition testo ScaleAssist IFOV warner Humidity mode – manual Humidity measurement with humidity measuring instrument ²) Solar mode – manual Electrical mode – manual	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and determination of reflected temperature (RTC) 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 Input of current, voltage or power
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ε-Assist Measuring functions Analysis functions testo SiteRecognition testo ScaleAssist IFOV warner Humidity mode – manual Humidity measurement with humidity measuring instrument ²) Solar mode – manual Electrical mode – manual Electrical measurement	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and determination of reflected temperature (RTC) Up to 5 selectable individual measuring points, hot/cold spot detection, Delta T, area measurement (min/max on area), alarms, isotherm v Automatic data transfer of testo 605i thermohygrometer via Bluetooth (instrument must be ordered separately) Input of solar radiation value Input of current, voltage or power Automatic data transfer of testo 770-3
Measurement Measuring range Accuracy Emissivity/reflected temperature adjustment testo ε-Assist Measuring functions Analysis functions testo SiteRecognition testo ScaleAssist IFOV warner Humidity mode – manual Humidity measurement with humidity measuring instrument ²) Solar mode – manual Electrical mode – manual	readings from testo 605i thermohygrometer, testo 770-3 clamp meter (optional) USB-C, USB 2.0 -30 to +650 °C ±2 °C, ±2% of the reading (higher value applies) 0.01 to 1 / manual Automatic recognition of emissivity and determination of reflected temperature (RTC) 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 Input of current, voltage or power

Imager features	1
Touch operation	capacitive touch display
Digital camera	<i>v</i>
Laser ³⁾	Laser marker (laser class 2, 635 nm)
Video streaming	via USB, via WLAN with testo Thermography App
Storage as JPG	 ✓
Fullscreen mode	 ✓
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	✓ 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	 ✓
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 11, 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

 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 Japan



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.