

testo 875 and testo 881 for professional building thermography

The testo 875 and testo 881 thermal imagers carry out fast and efficient tests on heating and air conditioning/ventilation systems. testo 875 and testo 881 support you in finding the cause when leaks are detected in floor heating systems or other difficult to access pipe systems. Defective installations can be accurately recognised by the thermal imager making it possible to quickly carry out damage control and specific maintenance.

testo 875 and testo 881 thermal imagers detect energy losses quickly and without damage. Weak points such as heat bridges as well as construction and building defects on the building's facade are displayed immediately on Testo's thermal imager.

Even the smallest temperature differences can be identified with the high temperature resolution of the Testo thermal imagers. Exchangeable telephoto lenses ensure top flexibility and that, depending on the application, the right image section can always be seen in the camera's display. The digital camera which is also built-in makes documentation easy.

Via the manual input of ambient temperature, air humidity and dewpoint in the room, testo 875 and testo 881 visualize mould risk spots in the thermal image at a glance. This important data helps improve indoor climate and prevent dangerous allergenic mould growth, or minimize the risk of mould – even in the hidden corners and niches of a house. With the Testo thermal imagers you are hot on the trail of burst pipes and can accurately check heating systems and installations.

Professional analysis software

Clearly structured and user-friendly PC software allows comprehensive analysis and evaluation of thermograms. You can now process, analyze and document several parallel infrared images in a report together with their respective real images. Especially for the purpose of examining building shells for heat bridges, the software offers report templates, with which reports compliant with DIN EN 13187 can be created. In order to achieve precise analysis results, it is possible to correct the thermal image according to the different emissivities of the various materials by area, right up to individual pixels. Pro software is included with all Testo thermal imagers.



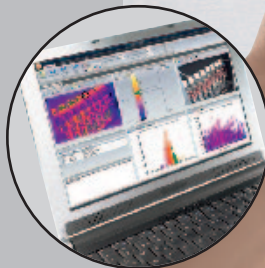
Just take it with you in the Soft-Case



Simply change the lens



Easy operation



Easy and precise analysis



The 4 most important advantages of the thermal imager testo 875

Good image quality

With the temperature resolution of <80 mK, even the smallest temperature differences are displayed.



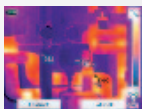
Integrated digital camera

The testo 875 with integrated digital camera links real and infrared images for your fast and easy documentation of the measurement.



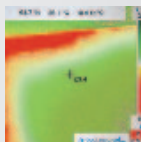
Automatic Hot-Cold-Spot recognition

Critical temperature statuses are displayed using automatic Hot-Cold-Spot recognition. This guarantees uninterrupted error localization on site. Auto Hot/Cold Spot Recognition facilitates analysis and documentation when evaluating the details later on a PC.



Detection of mould-risk spots

Via the manual input of ambient temperature, air humidity and dewpoint in the room, the testo 875 visualizes mould-risk spots in the thermal image at a glance.



testo 875-1

Part no. 0560 8751

testo 875-2

Part no. 0560 8752

testo 875-2 Set

Part no. 0563 8752

The 5 most important advantages of the thermal imager testo 881

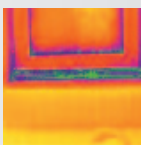
Highest image quality

With a thermal resolution of <50 mK, the testo 881 delivers high definition images which emphasize and visualize even the smallest temperature differences.



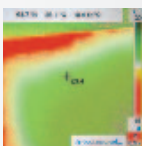
Isotherm function

With the optical coloured alarm, critical temperature areas on the measurement object are marked immediately in colour.



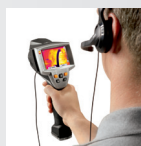
Detection of mould risk spots

Via the manual input of ambient temperature, air humidity and dewpoint in the room, the testo 875 and testo 881 visualize mould risk spots in the thermal image at a glance.



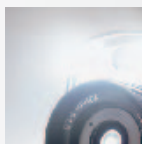
Voice recording

The practical headset and the integrated speech recording function simplify the documentation of the measurement results. Every image can be commented directly on site. This valuable information is stored together with the thermal image.



Integrated digital camera with power LEDs

In addition to infrared recording, the testo 881 creates a parallel real image of the measurement site with the integrated digital camera. The power LEDs guarantee optimum illumination of dark areas when recording real images.



testo 881-1

Part no. 0563 0881 V1

testo 881-2

Part no. 0563 0881 V2

testo 881-3

Part no. 0563 0881 V3

testo 881-3 Set

Part no. 0563 0881 V4



Ordering overview testo 875

testo 875-1

- NETD < 80 mK
- High quality standard lens 32° x 23°
- Auto Hot/Cold Spot Recognition
- Manual focus
- Temperature range -20 to +280 °C

Part no. 0560 8751

testo 875-2

- NETD < 80 mK
- High quality standard lens 32° x 23°
- Integrated digital camera
- Display of surface moisture distribution
- Auto Hot/Cold Spot Recognition
- Manual focus
- Temperature range -20 to +280°C
- Telephoto lens (optional)

Part no. 0560 8752

testo 875-2 Set

- NETD < 80 mK
- High quality standard lens 32° x 23°
- Integrated digital camera
- Display of surface moisture distribution
- Auto Hot/Cold Spot Recognition
- Manual focus
- Temperature range -20 to +280 °C

In addition to the equipment of testo 875-2, the set also includes:

- Telephoto lens 9° x 7°
- Protective lens
- Additional battery
- Charger
- Sun Shield

Part no. 0563 8752



Ordering overview testo 881

testo 881-1

- NETD < 50 mK
- High quality standard lens 32° x 23°
- Integrated digital camera
- Auto Hot/Cold Spot Recognition
- Manual focus
- Temperature range -20 to +350 °C
- 33 Hz (inside the EU, outside 9 Hz)

Part no. 0563 0881 V1

testo 881-2

- NETD < 50 mK
- High quality standard lens 32° x 23°
- Telephoto lens (optional)
- Auto Hot/Cold Spot Recognition
- Display of surface moisture distribution
- Manual focus
- Temperature range -20 to +350°C
- 33 Hz (inside the EU, outside 9 Hz)
- Headset for speech recording
- Lens protection glass
- Isotherm display in instrument
- Min-/Max on Area calculation

Part no. 0563 0881 V2

testo 881-3

- NETD < 50 mK
- High quality standard lens 32° x 23°
- Telephoto lens (optional)
- Built-in digital camera with power LEDs
- Display of surface moisture distribution
- Auto Hot/Cold Spot Recognition
- Dynamic motor focus
- Temperature range -20 to +350°C
- 33 Hz (inside the EU, outside 9 Hz)
- Headset for speech recording
- Lens protection glass
- Isotherm display in instrument
- Min-/Max on Area calculation
- High temperature measurement (optional)

Part no. 0563 0881 V3

testo 881-3 Set

- NETD < 50 mK
- High quality standard lens 32° x 23°
- Built-in digital camera with power LEDs
- Display of surface moisture distribution
- Auto Hot/Cold Spot Recognition
- Dynamic motor focus
- Temperature range -20 to +350°C
- 33 Hz (inside the EU, outside 9 Hz)
- Headset for speech recording
- Lens protection glass
- Isotherm display in instrument
- Min-/Max on Area calculation
- High temperature measurement (optional)

In addition to the equipment of testo 881-3, the set also includes:

- Telephoto lens 9° x 7°
- Additional battery
- Charger
- Soft-Case

Part no. 0563 0881 V4



		testo 881-1	testo 881-2	testo 881-3	testo 881-3 Set
	Part no.	0563 0881 V1	0563 0881 V2	0563 0881 V3	0563 0881 V4
Additionally in the case:					
Lens protection glass	C1	●	●	●	●
Telephoto lens	A1	–	●	●	●
Additional battery	D1	●	●	●	●
Fast battery charger	E1	●	●	●	●
Soft-Case	H1	●	●	●	●
High temperature measurement	G1	–	–	●	●

● Standard

● Optional

– Not available

All imagers are delivered in a robust case incl. pro software, SD card, USB cable, mains unit, Li ion rechargeable battery and tripod adapter.



Accessories for testo 875 and testo 881 thermal imagers

Aluminium tripod

Professional, extremely light and stable aluminium tripod with Quick-Release legs and 3-way tripod head



Part no. 0554 8804

Lens protection glass

Special Germanium protective glass for optimum protection of the lens from dust and scratching



Part no. 0554 8805

Additional battery

Additional lithium ion rechargeable battery for extending the operating time



Part no. 0554 8802

Fast battery charger

Desktop charging station for two rechargeable batteries for the optimization of charging time



Part no. 0554 8801

Sun Shield

Special sun shield for the display of testo 881 and testo 875 in bright surroundings



Part no. 0554 8806

Soft-Case

Practical carrying option for testo 881 and testo 875 (incl. shoulder strap)



Part no. 0554 8814

Additional accessories

Part no.

Retrofit telephoto lens
(for testo 881-2 and -3 and testo 875-2 only); please contact our Service.

Retrofit high temperature measurement
(for testo 881-3 only); Please contact our Service.

Adhesive tape, e.g. for bare surfaces (roll, L.: 10 m, W.: 25 mm), E = 0.95, temperature resistant to +250 °C

0554 0051

ISO calibration certificates for testo 875, testo 881
Calibration points at 0 °C, 25 °C, 50 °C in measuring range -20 °C to 100 °C

0520 0489

ISO calibration certificates for testo 881
Calibration points at 0 °C, 100 °C, 200 °C in measuring range 0 °C to 350 °C

0520 0490

ISO calibration certificates for testo 875, testo 881
Freely selectable calibration points in the range -18 °C to 250 °C

0520 0495

Technical data for testo 875 and testo 881 thermal imagers

	testo 875-1	testo 875-2	testo 881-1	testo 881-2	testo 881-3
Infrared image output					
Detector type	FPA 160 x 120 pixels, a.Si		FPA 160 x 120 pixels, a.Si		
Thermal sensitivity (NETD)	< 80 mK at +30 °C		< 50 mK at +30 °C		
Field of vision/min. focusing distance	32° x 23° / 0.1 m (standard lens), 9° x 7° / 0.5 m (telephoto lens)		32° x 23° / 0.1 m (standard lens), 9° x 7° / 0.5 m (telephoto lens)		
Geometric resolution (IFOV)	3.3 mrad (standard lens), 1.0 mrad (telephoto lens)		3.3 mrad (standard lens), 1.0 mrad (telephoto lens)		
Image refresh rate	9 Hz		33 Hz for EU, otherwise 9 Hz		
Focus	manual		manual and motor focus		
Spectral range	8 to 14 µm		8 to 14 µm		
Visual image output					
Field of vision/min. focusing distance	-	33° x 25° / 0.4 m	33° x 25° / 0.4 m	-	33° x 25° / 0.4 m
Image size	-	640 x 480 pixels	640 x 480 pixels	-	640 x 480 pixels
Image presentation					
Image display	3.5" LCD with 320 x 240 pixels		3.5" LCD with 320 x 240 pixels		
Display options	IR image only	IR image only / real image only/ IR and real image	IR image only / real image only/ IR and real image	IR image only	IR image only / real image only/ IR and real image
Video output	USB 2.0		USB 2.0		
Colour palettes	4 options (iron, rainbow, blue-red, shades of grey)		9 options (iron, rainbow, cold-hot, blue-red, grey, inverted grey, sepia, Testo, iron HT)		
Measurement					
Temperature range	-20 °C to +100°C / 0 °to +280 °C (switchable)		-20 °C to +100°C / 0 °to +350 °C (switchable)		
High temperature measurement (optional)	-		-		+350 °C to +550 °C
Accuracy	±2 °C, ±2% of mv (-20 °C to +280 °C)		±2 °C, ±2% of mv (-20 °C to +350 °C)		±3% of mv (+350 °C to +550 °C)
Minimum measurement spot diameter	10 mm at 1 m (standard lens), 3 mm at 1 m (telephoto lens)		10 mm at 1 m (standard lens), 3 mm at 1 m (telephoto lens)		
Setting emissivity	0,01 to 1		0,01 to 1		
Reflected temperature compensation	manual		manual		
Imager equipment					
Digital camera	-	yes	yes	-	yes
Power LEDs	-	-	-	-	yes
Motor focus	-	-	-	-	yes
Standard lens (32° x 23°)	-	yes	-	yes	
Telephoto lens (9° x 7°)	-	optional	-	optional	
Laser sighting	-	-	yes (laser classification 635 nm, Class 2)		
Speech recording	-	-	-	yes (using headset)	
Display of surface moisture distribution	-	yes (using manual input)	-	yes (using manual input)	
Measuring functions	Centre point	Standard measurement (1-point)	Standard measurement (1-point)		
	Hot/Cold Spot Recognition		Hot/Cold Spot Recognition		
	-		Two-point measurement		
	-		Isotherms		
	-		Min-/Max on Area		
Image storage					
File format	.bmt; export option in .bmp, .jpg, .csv		.bmt; export option in .bmp, .jpg, .csv		
Removable memory	SD card 2GB (approx. 1,000 images)		SD card 2GB (approx. 1,000 images)		
Power supply					
Battery type	Fast-charging, Li-ion battery can be changed on-site		Fast-charging, Li-ion battery can be changed on-site		
Operating time	4 hours		4 hours		
Charging options	In instrument/in charging station (optional)		In instrument/in charging station (optional)		
Mains operation	yes		yes		
Ambient conditions					
Operating temperature range	-15 °C to +40 °C		-15 °C to +40 °C		
Storage temperature range	-30 °C to +60 °C		-30 °C to +60 °C		
Air humidity	20% to 80% non-condensing		20% to 80% non-condensing		
Housing protection class	IP54		IP54		
Vibration (IEC 68-2-6)	2G		2G		
Physical features					
Weight	Approx. 900 g		Approx. 900 g		
Dimensions (L x W x H)	152 x 108 x 262 mm		152 x 108 x 262 mm		
Tripod mounting	yes		yes		
Housing	ABS		ABS		
PC software					
System requirements	Windows XP (Service Pack 2) Windows Vista, interface USB 2.0		Windows XP (Service Pack 2) Windows Vista, interface USB 2.0		
Norms, tests, warranty					
EU Directive	2004 / 108 / EC		2004 / 108 / EC		
Warranty	2 years		2 years		

