

## Datasheet

# Thermal imager

### testo 882 – reliable thermography with high image resolution

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Detector size 320 x 240 pixels

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SuperResolution technology to 640 x 480 pixels

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Thermal sensitivity  $< 50$  mK

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Built-in digital camera with power LEDs

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Special measurement mode for mould-risk areas

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High temperature measurement up to 550 °C

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With the thermal imager testo 882, you test materials and components reliably and securely. The testo 882 – in ergonomic pistol design – stands out thanks to very high-resolution thermal images and a high thermal sensitivity. This allows you to identify every detail on the measurement

object completely non-intrusively, and detect anomalies and weak spots more easily even at a great distance. For you, that means: You see more and have more security when measuring thermographically!

## Ordering data



## Accessories

	Code <sup>1)</sup> (Initial equipment)	Part no. (Retrofit)
SuperResolution. Four times more measurement values for even more detailed analysis of the thermal images	S1	0554 7806
Lens protection glass. Special Germanium protective glass for optimum protection of the lens from dust and scratching	C1	0554 8805
Additional battery. Additional lithium ion rechargeable battery for extending the operating time	D1	0554 8802
Fast battery charger. Desktop charging station for two rechargeable batteries for the optimization of charging time	E1	0554 8801
High temperature measurement up to +500 °C	G1	<sup>2)</sup>
Humidity measurement*	B1	<sup>2) 3)</sup>
Emission adhesive tape. Adhesive tape, e.g. for bare surfaces (roll, L.: 10 m, W.: 25 mm), $\epsilon = 0.95$ , temperature resistant to +250 °C		0554 0051
ISO calibration certificates; Calibration points at 0 °C, +25 °C, +50 °C		0520 0489
ISO calibration certificates; Calibration points at 0 °C, +100 °C, +200 °C		0520 0490
ISO calibration certificates; Freely selectable calibration points in the range -18 °C to +250 °C		0520 0495

\* Wireless humidity probes only in the EU, Norway, Switzerland, USA, Canada, Colombia, Turkey, Brazil, Chile, Mexico, New Zealand, Indonesia

<sup>1)</sup> When ordering as initial equipment, you receive the accessories directly in the case. Example: testo 882 incl. lens protection glass and additional battery: Order no. 0560 0882 C1 D1

<sup>2)</sup> Please contact our customer service

<sup>3)</sup> Plus installation

## Technical data

Infrared image output	
Detector type	FPA 320 x 240 pixels, a.Si
Thermal sensitivity (NETD)	<50 mK at +30 °C
Field of view/min. focus distance	32° x 23° / 0.2 m
Geometric resolution (IFOV)	1.7 mrad
SuperResolution (pixel / IFOV) - optional	640 x 480 pixels / 1.1 mrad
Image refresh rate	33 Hz*
Focus	manual and motor focus
Spectral range	8 to 14 µm
Image output visual	
Image size / min. focus distance	640 x 480 pixels / 0.4 m
Image presentation	
Image display	3.5" LCD with 320 x 240 pixels
Display options	IR image only / real image only / IR and real image
Video output	USB 2.0
Colour palettes	10 (iron, rainbow, rainbow HC, cold-hot, blue-red, grey, inverted grey, sepia, Testo, iron HT)
Measurement	
Temperature range	-20 to +100°C / 0 to +350 °C (switchable)
High temperature measurement - optional	+350 to +550 °C
Accuracy	±2 °C, ±2% of mv / (±3% of mv at +350 to +550 °C)
Emissivity / reflected temperature	0,01 to 1 / manual
Measuring functions	
Display of surface moisture distribution (using manual input)	✓
Humidity measurement with radio humidity probe (automatic measurement value transfer in real time)**	(✓)
Solar mode	✓
Analysis function	up to 2 measurement points, Hot/Cold Spot Recognition, Isotherms, Area measurement (Min-/Max on Area)

\* inside the EU, outside 9 Hz

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\*\*\* excepting USA, China and Japan

Imager equipment	
Digital camera	✓
Power LEDs	✓
Motor focus	✓
Standard lens	32° x 23°
Laser (laser classification 635 nm, Class 2)***	✓
Voice recording	wired headset
Video streaming (via USB)	✓
Image storage	
File format	.bmt; export option in .bmp, .jpg, .png, .csv, .xls
Storage device	SD card 2 GB (approx. 1.000 images)
Power supply	
Battery type	Fast-charging, Li-ion battery can be changed on-site
Operating time	4 hours
Charging options	In instrument/in charging station (optional)
Mains operation	yes
Ambient conditions	
Operating temperature range	-15 to +40 °C
Storage temperature range	-30 to +60 °C
Air humidity	+20 to +80% non-condensing
Housing protection class (IEC 60529)	IP54
Vibration (IEC 60068-2-6)	2G
Physical specifications	
Weight	Approx. 900 g
Dimensions (L x W x H) in mm	152 x 108 x 262
Tripod mounting	M6
Housing	ABS
PC software	
System requirements	Windows XP (Service Pack 3), Windows Vista, Windows 7 (Service Pack 1), interface USB 2.0
Standards, tests, warranty	
EU Directive	2004 / 108 / EC
Warranty	2 years

✓ included in delivery

(✓) optional

## Overview

Detector	320 x 240 pixels
Thermal sensitivity (NETD)	< 50 mK
Temperature range	-20 to +350 °C
Image refresh rate	33 Hz*
Lens 32° x 23°	✓
SuperResolution	(✓)
High temperature measurement up to 550 °C	(✓)
Integrated digital camera	✓
Integrated power LEDs	✓
Laser**	✓
Display of surface moisture distribution (by manual input)	✓
Humidity measurement with wireless humidity probe*** (automatic measurement value transfer in real time)	(✓)
Voice recording using the headset	✓
Motor focus	✓
Isotherm display in instrument	✓
Min/Max on Area calculation	✓
Auto Hot/Cold Spot Recognition	✓
Solar mode	✓
Lens protection glass	(✓)
Additional battery	(✓)
Fast battery charger	(✓)

✓ included in delivery

(✓) optional

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