

Technical data of the thermal imager



Product data	testo 882
Image output	
Infrared	
Detector type	FPA 320 x 240 pixels, a.Si
Thermal sensitivity (NETD)	< 60 mK at 30 °C
Field of view / min. focusing distance	32° x 23° / 0,2 m
Geometric resolution (IFOV)	1,7 mrad
Image refresh rate	33 Hz for EU, otherwise 9 Hz
Focus	manual and motor focus
Spectral range	8 to 14 µm
Visual	
Image size / min. focusing 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	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 +350 °C (switchable)
High temperature measurement (optional)	+350 °C to +550 °C
Accuracy	±2 °C, ±2% of m.v. (-20 °C to +350 °C) / ±3% of m.v. (+350 °C to +550 °C)
Emissivity / reflected temperature compensation	0.01 to 1 / manual
Imager equipment	
Digital camera	✓
Power LEDs	✓
Motor focus	✓
Standard lens(32°x23°)	✓
Laser measuring spot marking	✓ (laser classification 635 nm, Class 2)
Voice recording	✓
Display of surface moisture distribution	yes using manual input
Measuring functions	
Measurement	Standard measurement (1-point) / Two-point measurement
Hot/Cold Spot Recognition	✓
Isotherms	✓
Min-/Max on Area	✓
Image storage	
File format	.bmt; export options 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	approx. 4 hours
Charging options	in instrument or optionally in charger, with car adapter
Mains operation	Yes
Ambient conditions	
Operating temperature range	-15 °C to 40 °C
Storage temperature range	-30 °C to 60 °C
Air humidity	20% to 80% non-condensing
Housing protection class	IP 54
Vibration (IEC 68-2-6)	2G
Physical features	
Weight	approx. 900 g
Dimensions (L x W x H) in mm	152 x 108 x 262
Tripod mounting	yes, with adapter
Housing	ABS
PC software	
System requirements	Windows XP (Service Pack 2), Windows Vista, Windows 7, interface USB 2.0
Standards, tests, warranty	
EU Directive	2004 / 108 / EC
Warranty	2 years

Ordering data **testo 882**

Order no.	0560 0882
Price	
Detector	320 x 240
Thermal sensitivity (NETD)	< 60 mK
Temperature range	-20 °C to +350 °C
Image refresh rate	33 Hz*
Lens 32° x 23°	✓
High temperature measurement up to 550 °C	(✓)
Integrated digital camera	✓
Integrated power LEDs	✓
Voice recording using headset	✓
Motor focus	✓
Laser**	✓
Display of surface moisture (via manual input)	✓
Isotherm display in instrument	✓
Min/Max on Area calculation	✓
Auto Hot/Cold Spot Recognition	✓

(✓) Optional ✓ Standard

* within the EU, outside 9 Hz ** excepting USA, China and Japan.
The imager is delivered in a robust case incl. pro software, SD card, USB cable, mains unit, and Li ion rechargeable battery.

Order suitable accessories in a case:

	Order no.
Germanium lens protection glass	C1
Additional battery	D1
Fast battery charger	E1
Soft case	H1
High temperature measurement up to 550 °C	G1



Accessories **testo 882**

	Order no.		Order no.
Fast battery charger. Desktop charging station for two rechargeable batteries for the optimization of the charging time	0554 8801	Aluminium tripod. Professional, extremely light and stable aluminium tripod with Quick-Release legs and 3-way tripod head	0554 8804
Additional battery. Additional Lithium ion rechargeable battery for extending the operating time	0554 8802	Emissivity 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
Lens protection glass. Special Germanium protective glass for optimum protection of the lens from dust and scratching	0554 8805	Car charging adapter. Practical charging option for the thermal imager when travelling by car – can be used anywhere	0554 8817
Retrofit high temperature measurement Please contact our customer service	–	ISO calibration certificates Calibration points at 0 °C, 25 °C, 50 °C	0520 0489
Sun Shield. Special sun shield for the display of the thermal imager in bright surroundings	0554 8806	Calibration points at 0 °C, 100 °C, 200 °C	0520 0490
Soft case. Practical carrying option for the thermal imager incl. carrying strap	0554 8814	Freely selectable calibration points in the range -18 °C to 250 °C	0520 0495

Feature	testo 875-1	testo 875-2	testo 876	testo 881-1	testo 881-2	testo 882	
Detector size (in pixels)	160 x 120					320 x 240	
Thermal sensitivity (NETD)	< 80 mK		< 50 mK		< 60 mK		
Temperature measuring range	-20 °C to +280 °C		-20 °C to +350 °C				
Image refresh rate	9 Hz		33 Hz*				
Standard lens 32°	✓	✓	✓	✓	✓	✓	
Exchangeable telephoto lens 9°	-	(✓)	(✓)	-	(✓)	-	
Rotatable display	-	-	✓	-	-	-	
High temperature up to 550 °C	-	-	-	-	(✓)	(✓)	
Auto Hot/Cold Spot Recognition	✓	✓	✓	✓	✓	✓	
Min-/Max on Area calculation	-	-	✓	-	✓	✓	
Isotherm function	-	-	✓	-	✓	✓	
Display of surface moisture via manual input	-	✓	✓	-	✓	✓	
Voice recording	-	-	✓	-	✓	✓	
Integrated digital camera	-	✓	✓	✓	✓	✓	
Integrated LEDs	-	-	-	-	✓	✓	
Motor focus	-	-	✓	-	✓	✓	
Laser**	-	-	-	✓	✓	✓	

() Optional Standard

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Your practical benefit

The detector size indicates the number of temperature measurement points with which the thermal imager is equipped. The more pixels, the more detailed and clearer are the measurement objects presented.

The NETD displays the smallest temperature difference which can be resolved by the imager. A low NETD guarantees the resolution of the smallest temperature differences. The rule of thumb is: the smaller this value is, the better is the measurement resolution.

The temperature range of your thermal imager informs you, up to which temperature your imager is able to record and measure the heat radiation of objects.

The display refresh rate informs as to how frequently the thermal imager is refreshed per second.

The 32° lens records a large image section, creating an ideal overview of the temperature distribution of a measurement object – there is more in the image at a glance.

The exchangeable telephoto lens assists in the measurement of smaller details and visualizes them even at greater distances in your thermal image.

Thanks to the rotatable display, you can thermograph with assurance from any position. Undesired reflections on the display are now avoided.

With the high temperature option, the measuring range can be flexibly extended. Thanks to a high temperature filter, the measurement of temperatures up 550 °C is possible.

The coldest and the hottest spot of your measurement object are automatically marked in the thermal image in the imager display – critical heat stati are detected at a glance.

The minimum and maximum values of an image section can be determined directly on site and at a glance.

The optical colour alarm localizes critical areas easily and directly in the thermal image. All points whose temperature values are within a pre-defined range, are marked in colour.

Via the manual input of ambient temperature, air humidity and dewpoint, mould risk spots are visualized in the thermal image at a glance.

Localized weak spots can be easily commented using voice recording. You thus document valuable additional information directly on site.

Faster and easier object inspection thanks to the display of infrared and real image. The digital photo is automatically stored in addition to every infrared image.

The power LED's guarantee you optimum illumination of dark areas when recording real images.

The dynamic motor focus allows you to focus the infrared image with one hand.

The perfect support for orientation as to which part of the object is being measured.



