

# Datasheet

## Thermal imager

**testo 876 – flexible thermography in practical camcorder design**



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Detector size 160 x 120 pixels

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SuperResolution technology to 320 x 240 pixels

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Thermal sensitivity < 80 mK

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Flexible fold-out, rotatable display

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Integrated digital camera

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Exchangeable lenses

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Special measurement mode for mould-risk areas

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With the thermal imager testo 876, you keep the flexible rotatable fold-out display in view when taking thermographic measurements in any position, securely reaching every corner. This allows you to identify anomalies

and weak spots completely non-intrusively in buildings, mechanical components, photovoltaic systems or switching cabinets. For you, that means a better overview, providing more security when measuring thermographically.

## Ordering data

### testo 876

Thermal imager testo 876 in a robust case incl. pro software, SD card, USB cable, lens cleaning cloth, headset, mains unit, and Li ion rechargeable battery



Part no. 0560 8761

### testo 876 Set

Thermal imager testo 876 set in a robust case incl. pro software, SD card, USB cable, lens cleaning cloth, headset, mains unit, Li ion rechargeable battery, telephoto lens 9° x 7°, lens protection glass, spare battery and fast charger



Part no. 0560 8762

## Accessories

	<b>Part no.</b>
SuperResolution. Four times more measurement values for even more detailed analysis of the thermal images	0554 7806
Fast battery charger. Desktop charging station for two rechargeable batteries for the optimization of the charging time.	0554 8851
Additional battery. Additional lithium-ion rechargeable battery for extending the operating time.	0554 8852
Lens protection glass. Special Germanium protective glass for optimum protection of the lens from dust and scratching	0554 8805
Retrofit telephoto lens. Please contact our customer service	-
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

## Technical data

Infrared image output	
Detector type	FPA 160 x 120 pixels, a.Si
Thermal sensitivity (NETD)	< 80 mK at +30 °C
Field of view/min. focus distance	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)
SuperResolution (pixel / IFOV) - optional	320 x 240 pixels / 2.1 mrad (standard lens), 0.6 mrad (telephoto lens)
Image refresh rate	9 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" fold-out 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 +280 °C (switchable)
Accuracy	±2 °C, ±2% of mv
Emissivity / reflected temperature	0,01 to 1 / manual
Measuring functions	
Display of surface moisture distribution (using manual input)	✓
Solar mode	✓
Analysis function	Standard measurement (1-point) Hot/Cold Spot Recognition, Isotherms, Area measurement (Min-/Max on Area)

Imager equipment	
Digital camera	✓
Motor focus	✓
Standard lens	32° x 23°
Exchangeable lenses - optional	9° x 7°
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 2GB (approx. 2.000 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	210 x 85 x 97
Tripod mounting	1/4" - 20UNC
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

✓ Standard

## Overview of variants

Features	testo 876	testo 876 Set
Detector	160 x 120 pixels	
Thermal sensitivity (NETD)	< 80 mK	
Temperature range	-20 to +280 °C	
Image refresh rate	9 Hz	
Lens 32° x 23°	✓	✓
Exchangeable telephoto lens 9° x 7°	(✓)	✓
SuperResolution	(✓)	(✓)
Integrated digital camera	✓	✓
Display of surface moisture distribution (by manual input)	✓	✓
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