

We measure it.



Datasheet

Thermal imager

**testo 875 and testo 875i –
the entry into professional
thermography**



Detector size 160 x 120 pixels

SuperResolution technology to 320 x 240 pixels

Thermal sensitivity < 50 mK

Built-in digital camera with power LEDs

Exchangeable lenses

Measurement mode for detecting mould-risk areas

High temperature measurement up to 550 °C

The thermal imager testo 875 quickly and reliably detects anomalies and weak spots in materials and components. Thanks to an imaging process, energy losses and cold bridges as well as damage or overheating in industrial

systems are detected without contact. Whereas with other methods, cable or pipeline systems must be exposed over a large area, with the thermal imager testo 875, a single glance is enough.

Ordering data

testo 875-1

The thermal imager testo 875-1 with a detector resolution of 160 x 120 pixels, a thermal sensitivity of < 80 mK and 32° standard lens. In a robust case including pro software, Soft-Case, carrying strap, SD-card, USB cable, lens cleaning cloth, mains unit, Li-ion rechargeable battery and tripod adapter.

Part no. 0560 8751



testo 875-2i

Thermal imager testo 875-2i in a robust case incl. pro software, Soft Case, carrying strap, SD card, USB cable, lens cleaning cloth, mains unit, Li ion rechargeable battery, tripod adapter and headset.

Part no. 0563 0875 V2

testo 875-1i

Thermal imager testo 875-1i in a robust case incl. pro software, Soft Case, carrying strap, SD card, USB cable, lens cleaning cloth, mains unit, Li ion rechargeable battery and tripod adapter.

Part no. 0563 0875 V1

testo 875-2i set

Thermal imager testo 875-2i set in a robust case incl. pro software, Soft Case, carrying strap, SD card, USB cable, lens cleaning cloth, mains unit, Li ion rechargeable battery, tripod adapter, headset, telephoto lens 9° x 7°, lens protection glass, spare battery and fast charger



Part no. 0563 0875

Accessories

	Code ¹⁾ (First equipment testo 875i)	Part no. (Retrofit)
SuperResolution. Four times more measurement values for even more detailed analysis of the thermal images	S1	0554 7806
Fast battery charger. Desktop charging station for two rechargeable batteries for the optimization of charging time	E1	0554 8801
Additional battery. Additional lithium ion rechargeable battery for extending the operating time	D1	0554 8802
Lens protection glass. Special Germanium protective glass for optimum protection of the lens from dust and scratching	C1	0554 8805
Retrofit telephoto lens (for testo 875-2 only); please contact our customer service	A1	²⁾
High temperature measurement up to 550 °C (testo 875-2i only)	G1	²⁾
Humidity measurement with wireless humidity probe* (testo 875-2i only)	B1	^{2) 3)}
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

¹⁾ When ordering as initial equipment, you receive the accessories directly in the case. Example: testo 875-1i incl. lens protection glass and spare battery: Order no. 0563 0875 V1 C1 D1

²⁾ Please contact our customer service

³⁾ Plus installation

Technical data

	testo 875-1	testo 875-1i	testo 875-2i
Infrared image output			
Detector type	FPA 160 x 120 pixels, a.Si		
Thermal sensitivity (NETD)	< 80 mK at +30 °C	< 50 mK at +30 °C	
Field of view/min. focus distance	32° x 23° / 0.1 m (Standard lens)	32° x 23° / 0.1 m (Tele: 9° x 7° / 0.5 m)	
Geometric resolution (IFOV)	3,3 mrad (Standard lens)	3,3 mrad (Tele: 1.0 mrad)	
SuperResolution (pixel / IFOV) - optional	320 x 240 pixels / 2.1 mrad (Standard lens)	320 x 240 pixels / 2.1 mrad (Tele: 0.6 mrad)	
Image refresh rate	9 Hz	33 Hz*	
Focus	manual		
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	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)		
Image presentation			
Temperature range	-20 to +100°C / 0 to +280 °C (switchable)	-20 to +100°C / 0 to +350 °C (switchable)	
High temperature measurement – optional	-	+350 to +550 °C	
Accuracy	±2 °C, ±2% of mv	±2 °C, ±2% of mv (±3% of mv at +350 to +500 °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	Centre point Hot/Cold Spot Recognition	up to 2 measurement points, Hot/Cold Spot Recognition	up to 2 measurement points, Hot/Cold Spot Recognition, Isotherms, Area measurement (Min-/Max on Area)

* inside the EU, outside 9 Hz

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

*** excepting USA, China and Japan

	testo 875-1	testo 875-1i	testo 875-2i
Imager equipment			
Digital camera	-		✓
Power LEDs	-	-	✓
Standard lens	32° x 23°		
Exchangeable lenses - optional	-	-	9° x 7°
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 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	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

- not available

Overview of variants

Features	testo 875-1	testo 875-1i	testo 875-2i	testo 875-2i Set
Detector	160 x 120 pixels			
Thermal sensitivity (NETD)	< 80 mK	< 50 mK		
Temperature range	-20 to +280 °C	-20 to +350 °C		
Image refresh rate	9 Hz	33 Hz*		
Lens 32° x 23°	✓	✓	✓	✓
Exchangeable telephoto lens 9° x 7°	-	-	(✓)	✓
SuperResolution	(✓)	(✓)	(✓)	(✓)
High temperature measurement up to 550 °C	-	-	(✓)	(✓)
Integrated digital camera	-	✓	✓	✓
Integrated power LEDs	-	-	✓	✓
Voice recording using the headset	-	-	✓	✓
Laser marker**	-	✓	✓	✓
Display of surface moisture distribution (by manual input)	-	-	✓	✓
Humidity measurement with wireless humidity probe*** (automatic measurement value transfer in real time)	-	-	(✓)	(✓)
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
- not available

* inside the EU, outside 9 Hz
 ** excepting USA, China and Japan
 *** Wireless humidity probes only in the EU, Norway, Switzerland, USA, Canada, Colombia, Turkey, Brazil, Chile, Mexico, New Zealand, Indonesia