

We measure it.



Datasheet

Thermal imager

testo 875 and testo 875i – versatile professional-level thermography



Infrared resolution 160 x 120 pixels

SuperResolution technology to 320 x 240 pixels

Thermal sensitivity < 50 mK

Built-in digital camera with power LEDs (testo 875i)

Exchangeable lenses

Measurement mode for detecting mould-risk areas

High temperature measurement up to 550 °C

The testo 875 thermal imager detects anomalies and weak spots in materials and components quickly and reliably. 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. testo SuperResolution technology also increases the resolution of the testo 875/875i from 160 x 120 pixels in the Software testo IRSof to 320 x 240 pixels. That's four times as many readings, enabling you to spot even the smallest irregularities.

Ordering data

testo 875-1

Thermal imager testo 875-1 in a robust case, including professional software, soft case, carrying strap, SD card, USB cable, lens cleaning cloth, mains unit, rechargeable Li-ion battery and tripod adapter



Part no. 0560 8751

testo 875-2i

Thermal imager testo 875-2i with integrated testo SuperResolution and digital camera, in a robust case including professional software, soft case, carrying strap, SD card, USB cable, lens cleaning cloth, mains unit, rechargeable Li-ion battery, tripod adapter and headset



Part no. 0563 0875 V2

testo 875-1i

Thermal imager testo 875-1i with integrated testo SuperResolution and digital camera, in a robust case, including professional software, soft case, carrying strap, SD card, USB cable, lens cleaning cloth, mains unit, rechargeable Li-ion battery and tripod adapter



Part no. 0563 0875 V1

testo 875-2i set

Thermal imager testo 875-2i set with integrated testo SuperResolution and digital camera, in a robust case, including professional software, soft case, carrying strap, SD card, USB cable, lens cleaning cloth, mains unit, rechargeable Li-ion battery, tripod adapter, headset, 9° x 7° telephoto lens, lens protector, spare rechargeable battery and fast battery charger



Part no. 0563 0875 V3

Accessories

	Code ¹⁾ (First equipment testo 875i)	Part no. (Retrofit)
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 reflective 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 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			
Infrared resolution	160 x 120 pixels		
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)	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	7.5 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			
Measuring range	-20 to +100°C / 0 to +280 °C (switchable)	-30 to +100°C / 0 to +350 °C (switchable)	
Accuracy	±2 °C, ±2 % of m.v.	±2 °C, ±2 % of m.v. (±3 °C of m.v. at -30 to -22 °C)	
High temperature measurement – optional	–	+350 to +550 °C	
Accuracy		±3 % of m.v. 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	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 % RH 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), Windows 8, 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
Infrared resolution	160 x 120 pixels			
Thermal sensitivity (NETD)	< 80 mK	< 50 mK		
Measuring range	-20 to +280 °C	-30 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 pointer**	-	✓	✓	✓
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

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 ** excepting USA, China and Japan
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