



## Thermal imager

# testo 885 - professional, versatile and precise thermography

Infrared resolution 320 x 240 pixels

SuperResolution technology with 640 x 480 pixels

Thermal sensitivity < 30 mK

Flexibility thanks to its rotating handle and rotating, fold-out display

Exchangeable lenses

Measurement mode for detecting mould-risk areas

High temperature measurement up to 1200 °C

Panorama image assistant

SiteRecognition technology



The thermal imager testo 885 is the professional measuring instrument for the high-precision detection of anomalies/ hot spots in HV and EHV Switch yards and Transmission lines. This can also be effectively used to find out anomalies and damage to building shells or interiors. The high quality infrared measurement system means that energy losses or thermal bridges in building shells can be reliably detected, enabling comprehensive energy consultations to be carried out. Indoor leaks can be reliably located, without needing to dismantle cable or pipeline systems.

Due to its precision measurement capability, it can also be used in Medical Research applications. The intuitive testo 885 with its rotating handle, fold-out display and lots of helpful functions, such as site recognition, panorama image assistant and auto-focus, makes it is possible to carry out both quick on-site checks as well as comprehensive energy consultations with professional reports simply, reliably and professionally.



## Ordering data

testo 885 thermal imagers Part	no.
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testo 885 thermal imager with one lens (choice between 30° standard lens, 25° lens and 11° telephoto lens) in a robust case, including professional software, SD card, USB cable, carrying strap, lens-cleaning cloth, mains unit, Li-ion rechargeable battery and headset	0563 0885 X1	
Thermal imager testo 885 with super-telephoto lens in a robust case, including pro software, SD card, USB cable, carrying strap, lens-cleaning cloth, mains unit, Li ion rech. battery and headset	0563 0885 X4	

#### testo 885 sets with your selection of lenses

Complete kits in a robust case, each including professional software, SD card, USB cable, carrying strap, lens-cleaning cloth, mains unit, Li-ion rechargeable battery, headset, lens case, lens protection glass, additional rechargeable battery and fast charging station. Choice between 30° standard lens, 25° lens and/or 11° telephoto lens.



Р	a	r	t	n	o	

testo 885 set with two lenses – see above for further set components	0563 0885 X2	
testo 885 set with three lenses – see above for further set components	0563 0885 X3	
testo 885 set with SuperTele and one lens - see above for further set components	0563 0885 X5	
testo 885 set with SuperTele and two lenses - see above for further set components	0563 0885 X6	

#### **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 protection glass for optimum protection of the lens from dust and sctratching	F1	0554 0289	
Additional battery. Additional lithium-ion rechargeable battery for extending the operating time.	G1	0554 8852	
Fast battery charger. Desktop charging station for two rechargeable batteries for the optimization of the charging time.	H1	0554 8851	
High temperature measurement up to +1,200 °C	I1	2)	
Humidity measurement <sup>3)</sup>	E1	2)	
Telephoto lens 11° x 9°	D1	2)	
25° Lens	01	2)	
Super-telephoto lens 5° x 3.7°	T2	2)	
Process analysis package: image sequence capturing in instrument and fully radiometric video measurement	V1	0554 8902	
FeverDetection	J1	2)	
Emission adhesive tape. Adhesive tape, e.g. for reflective surfaces (roll, L.: 10 m, W.: 25 mm), $\epsilon$ = 0.95, temperature resistant to +250 $^{\circ}\text{C}$	0554 0051		
PC software testo IRSoft for data analysis and reporting	0501 8809		
ISO calibration certificates; Calibration points at 0 °C, +25 °C, +50 °C			
ISO calibration certificates; Calibration points at 0 °C, +100 °C, +200 °C			
ISO calibration certificates; Freely selectable calibration points in the range -18 to +250 °C		0520 0495 4)	

 $<sup>^{\</sup>rm 9}$  When ordering as first equipment, you receive the accessories directly in the case.  $^{\rm 2}$  Please contact our customer service.

<sup>&</sup>lt;sup>3</sup> Wireless humidity probes only in the EU, Norway, Switzerland, USA, Canada, Colombia, Turkey, Brazil, Chile, Mexico, New Zealand, Indonesia.

<sup>4)</sup> Per lens
5) Plus installation



## Technical data

Infrared image output		
Infrared resolution	320 x 240 pixels	
Thermal sensitivity (NETD)	< 30 mK at +30 °C	
Field of view/min. focus distance (Lens version)	30° x 23° / 0.1 m (Standard) 25° x 19° / 0.2 m (25° Lens) 11° x 9° / 0.5 m (Telephoto) 5° x 3.7° / 2 m (Super-telephoto)	
Geometric resolution (IFOV) (Lens version)	1.7 mrad (Standard) 1.36 mrad (25° Lens) 0.6 mrad (Telephoto) 0.27 mrad (Super-telephoto)	
SuperResolution (pixel / IFOV) (Lens version)	640 x 480 pixels / 1.06 mrad (Standard) 640 x 480 pixels / 0.85 mrad (25° Lens) 640 x 480 pixels / 0.38 mrad (Telephoto) 640 x 480 pixels / 0.17 mrad (Super-telephoto)	
Image refresh rate	9 Hz/ 33 Hz*	
Focus	auto and manual	
Spectral range	7.5 to 14 µm	
Image output visual		
Image size / min. focus distance	3.1 MP / 0.5 m	
Image presentation		
Image display	4.3" LCD colour touchscreen display with 480 x 272 pixels	
Digital zoom	4X - in steps	
Display options	IR / real image	
Video output	USB 2.0, Micro HDMI	
Colour palettes	9 (iron, rainbow, rainbow HC, cold-hot blue-red, grey, inverted grey, sepia, Testo)	
Measurement		
Measuring range Accuracy	-30 to +100 °C / 0 to +350 °C (switchable) 0 to +650 °C (switchable) ±2 °C, ±2 % of m.v. (±3 °C of m.v. at -30 to -22 °C)	
High temperature measurement - optional Accuracy	+350 to +1200 °C (not in connection with the telephoto lens) ±2 °C, ±2 % of m.v.	
Emissivity / reflected temperature	0.01 to 1 / manual	
Transmission correction (atmosphere)	V	
Measuring functions		
Display of surface moisture distribution (using manual input)	V	
Humidity measurement with radio humidity probe (automatic measurement value transfer in real time)**	( <b>v</b> )	
Solar mode	V	
Analysis function	up to 10 measurement points, Hot/Cold Spot Recognition, up to 5 x area measurement (min/max & average), Isotherm and alarm values	

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
 Bluetooth only in the EU, Norway, Switzerland, USA, Canada, Colombia, Turkey, Japan, Russia, Ukraine, India, Australia

nager equipment	
igital camera ith Power LEDs	V
ens version	30° x 23° (Standard)
	25° x 19° (25° Lens)
	11° x 9° (Telephoto)
t-D	5° x 3.7° (Super-telephoto)
teRecognition (measure- ent site recognition with age management)	•
norama image assistant	<b>,</b>
ser (laser classification 5 nm, Class 2)***	Laser marker
pice recording	Bluetooth****, for 60 Sec., po
deo measurement ia USB)	up to 3 measurement points
rocess analysis package:	( <b>✓</b> )
nage sequence capturing instrument and illy radiometric video leasurement	Auto Capture
everDetection	( <b>v</b> )
terface	LabVIEW, interface description download on the Testo homepage
nage storage	
le format single image	.bmt; Exportmöglichkeit in .bmp, .jpg, .png, .csv, .xls
le format video (via USB)	.wmv, .mpeg-1
orage device	SD cart 2GB (approx. 1500 - 2000 ima (Optional: Available 16GB wi-fi SD ca
ower supply	
attery type	Fast-charging, Li-ion battery can be changed on-site
perating time	4.5 hours
arging options	in instrument / in charger (optional)
ins operation	V
nbient conditions	
erating temperature nge	-15 °C to +50 °C
orage temperature range	-30 to +60 °C
r humidity	10 to 90 % RH non-condensing
ousing protection class EC 60529)	IP54
ibration (IEC 60068-2-6)	2G
nysical specifications	
eight	1570 g
mensions (L x W x H)	253 x 132 x 111 mm
pod mounting	1/4" - 20UNC
pusing	ABS
C software	
ystem requirements	Windows 10, Windows Vista, Windows 7 (Service Pack 1), Windows 8, interface USB 2.0
tandards, tests	
U Directive	2004 / 108 / EC

✓ included in delivery (✓) optional

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## Overview of variants

Features	testo 885	testo 885 Set	
Infrared resolution	320 x 240 pixels		
Thermal sensitivity (NETD)	< 30 mK		
Measuring range	-30 to	+650 °C	
Image refresh rate	9 Hz/ 33 Hz*		
SuperResolution	~	V	
25° x 19° Lens	(✔)	<b>(✔</b> )	
Telephoto lens 11° x 9° *****	<b>(✓)</b>	~	
Super-telephoto lens 5° x 3.7° *****	<b>(✓)</b>	~	
Auto focus	~	V	
High temperature measurement up to 1,200 °C	(✔)	<b>(✔</b> )	
Panorama image assistant	~	V	
SiteRecognition (measurement site recognition with image management)	V	~	
Laser marker**	~	~	
Display of surface moisture distribution (by manual input)	~	~	
Humidity measurement with wireless humidity probe*** (automatic measurement value transfer in real time)	( <b>v</b> )	( <b>v</b> )	
HDMI interface	~	~	
FeverDetection	( <b>~</b> )	( <b>~</b> )	
Process analysis package: image sequence capturing in instrument and fully radiometric video measurement	( <b>v</b> )	( <b>v</b> )	
Voice recording using the headset****	~	V	
Solar mode	~	~	
Lens protection glass	( <b>~</b> )	~	
Additional battery	( <b>~</b> )	~	
Fast battery charger	( <b>~</b> )	~	

included in delivery

(✔) optional

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
Bluetooth only in the EU, Norway, Switzerland,
USA, Canada, Colombia, Turkey, Japan, Russia,
Ukraine, India, Australia
depending on the selected set