



Committing to the future

See more with the NEW
testo 880 thermal imager

NEW!



SEE MORE...

Infrared radiation cannot be seen by the human eye. All objects whose temperature is above absolute zero (approximately -273 degrees centigrade), emit infrared radiation.

Thermal imagers can convert infrared radiation into electric signals and display a thermal image.

With the excellent image quality of the testo 880, even the smallest temperature differences can be displayed. Exchangeable lenses ensure that the optimum image is always possible.

The integrated digital camera makes documenting images easier.

Unique in thermal imagery, the testo 880 measures surface humidity with real-time humidity measurement, for identification and display of mould risk areas.

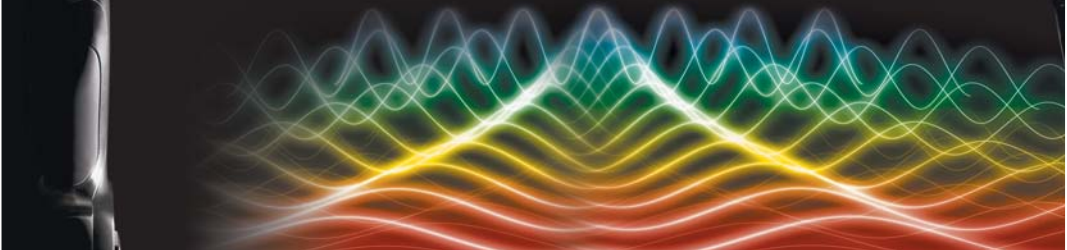


...OFFER MORE.

Mobile thermal imagers scan equipment or buildings and transform infrared radiation into visible thermal images with which a qualitative and quantitative analysis of temperature can be conducted.

Portable thermal imaging cameras are used in building inspection surveys as well as in mechanical and electrical inspections for preventive service and maintenance. They are used for monitoring buildings and production processes as well as for technical diagnostics.

A thermal imager is able to detect thermal anomalies, thus making the search for errors and the early implementation of preventive measures possible. Thermal imaging is able to thoroughly check materials and components without interference and exposes problem areas such as hot spots before a malfunction can occur. While other methods require production to be halted, or pipe systems to be dismantled, with the testo 880 a single glance is sufficient.





Buildings

Infrared technology is ideal for fast and effective analysis of building energy losses.

Building surveys

Leakages in underfloor heating

The testo 880 is ideal for pinpointing leakages in underfloor heating or other inaccessible pipe systems.



Identifying potential mould spots

With the unique wireless humidity probe capability, the testo 880 offers real time humidity measurement, identifying potential mould risk areas in buildings and houses.



Electrical maintenance inspections

In low, medium and high voltage systems, infrared thermography allows an evaluation of the level of heating. This enables defective components or connections to be identified early and the required preventive steps taken, thus minimizing the danger of fire and helping to avoid costly downtimes.

In addition to the infrared image, a real image of the measurement site can be recorded with the integrated digital camera. The allocation of the real image to the infrared image is carried out by the software.

Industrial thermography



Production monitoring

The testo 880 allows you to look thermally at many production processes, allowing precise analysis of quality assurance and process monitoring.

Mechanical maintenance inspections

Infrared measurements also offer multiple possibilities for use in industrial preventive maintenance.

Heat development, especially in mechanical components can indicate strain caused by friction, incorrect adjustment and excessive tolerances of the components or insufficient lubrication. With its high temperature resolution, the testo 880 provides an exact diagnosis.



1 Accurate results thanks to precise and reliable measurements



Excellent image quality enables reliable diagnosis, even for the smallest temperature differences.
 Integrated digital camera with power LEDs for the optimum illumination of dark areas
 The dynamic motor focus with one-hand operation, guarantees high-resolution images...even at a short distance of 10cm.

testo 880 – value for money, leading edge technology

With a thermal resolution <math>< 0.1^\circ\text{C}</math>, advanced electronics and image interpolation to 320 x 240 pixels, the testo 880 delivers high definition images - a breakthrough in this price range!

The easy to change, wide angle and telephoto lenses have a wide range of applications and the high quality germanium optics guarantee high performance.

The digital image which is shown inside the thermal image, enables easy identification and the IR protective glass protects the lens from dust and scratches.

The simple joystick operation allows easy navigation, file creation and effortless data management.



2 Versatile in a wide array of applications



Easy to change wide angle and telephoto lenses for a wide range of applications.
 The IR protective glass protects the lens from dust and scratches.
 Easy joystick operation for navigating through menu and image gallery.
 Surface moisture can be displayed, identifying potential mould-risk spots.
 Easy navigation and file creation for effortless data management.

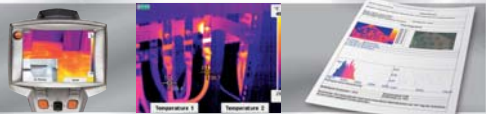


33 Hz real time image*

Thermal resolution <math>< 0.1^\circ\text{C}</math>

Large display, 320 x 240 pixels

3 Easy operation



Digital image inside thermal image for easy identification
 On screen display of two measurement points for exact calculation of temperature differences
 Detailed printout of inspection results



USB connection

SD card

User defined fast selection buttons

Easy to use menu

Powerful IR software with full reporting features included as standard with all versions

*inside EU, 9 Hz outside

testo 880-3 Professional Set

The professional thermal imager set offering unbeatable value for money!

In addition to the testo 880-3, the Professional Set contains:

- Telephoto lens
- Spare battery
- Fast charger
- Sunshield



testo 880-3 Professional Set

Part no. 0563 0880 V4

Price: £5,695.00



The testo 880 range

testo 880-1

Entry level thermal imager for fast fault finding and quality assurance

Features

- High quality wide angle lens 32° with F1 optics
- Image refresh rate 9 Hz
- Detector 160 x 120 interpolated to 320 x 240 pixels
- NETD < 0.1°C
- Manual focus
- Data storage device SD, 1 GB for approx. 800-1000 images
- Minimum focus distance 10 cm

Included as standard

- Powerful IR software with full reporting features
- USB cable
- Li-ion battery
- High quality robust case

testo 880-1

Part no. 0563 0880 V1 Price: £3,549.00

testo 880-2

The mid range thermal imager kit offering extensive analysis functions. Telephoto lens upgrade option available.

Features

- High-quality wide angle lens 32° with F1 optics
- Image refresh rate 33 Hz
- Detector 160 x 120 interpolated to 320 x 240 pixels
- NETD < 0.1°C
- Manual focus
- Data storage device SD, 1 GB for approx. 800-1000 images
- Minimum focus distance 10 cm

Included as standard

- Powerful IR software with full reporting features
- USB cable
- Li-ion battery
- Lens protection glass
- High quality robust case

testo 880-2

Part no. 0563 0880 V2 Price: £4,295.00

testo 880-3

The professional thermal imager for complete analysis and real image documentation with built-in digital camera and dynamic motor focus.

Features

- Built-in digital camera with power LEDs
- Dynamic motor focus
- Real-time display of surface moisture distribution with wireless humidity probe (optional)
- High quality wide angle lens 32° with F1 optics
- Image refresh rate 33 Hz
- Detector 160 x 120 interpolated to 320 x 240 pixels
- NETD < 0.1°C
- Manual focus
- Data storage device SD, 1 GB for approx. 800-1000 images
- Minimum focus distance 10 cm

Included as standard

- Powerful IR software with full reporting features
- USB cable
- Li-ion battery
- IR protective glass
- High quality robust case

testo 880-3

Part no. 0563 0880 V3 Price: £4,995.00

Technical data

	testo 880-1	testo 880-2	testo 880-3
Image specifications			
Infrared			
Optical field/ran, focus distance	32" x 24" / 0,1 m (standard lens), 12" x 9" / 0,6 m (telephoto lens)		
Thermal sensitivity (NETD)	<0,1 °C at 30 °C		
Geometric resolution	3,5 mrad (standard lens), 1,3 mrad (telephoto lens)		
Image refresh rate	9 Hz	9 Hz outside, 33 Hz inside EU	
Focus	manual		manual + motorized
Detector type	FPA 160 x 120 pixels, a-Si		
Spectral range	8 to 14 µm		
Visual (Digital Camera)			
Optical field/ran, focus distance			33,2" x 25,2" / 0,4 m
Image size			640 x 480 Pixel
Image refresh rate			8 ... 15 Hz
Image presentation			
Image display	3,5" LCD with 320 x 240 Pixel		
Display options	IR image only		IR image only / real image only / IR and real image
Video output	USB 2.0		
Video stream	9 Hz	25 Hz	
Colour palette	8 options		
Measurement			
Temperature range	-20 to +100 °C 0 to +350 °C (optional)		
Accuracy	±2 °C, ±2% of mv		
Minimum diameter measurement point	3 x 3 pixels standard 10 mm at 1 m (standard lens), standard 4 mm at 1 m (telephoto lens)		
Switch-on time	40 s		
Humidity measurement and air temperature measurement with wireless probe (optional)			0 to 100 %rh / -20 to +100 °C hd 20 to +70 °C (air temperature with NTC)
Accuracy wireless probe	±2 °C, ±2% (air temperature)		
Measurement functions	Standard measurement (1-point), 2-point measurement		Dewpoint calculation via manual input of humidity surface humidity measurement Optional humidity measurement with wireless humidity probe
Reflected temperature compensation	manual		
Setting emissivity	Nine materials programmable, one of which is user-defined (0.01 - 1.0)		
Image storage			
File format	.bmp; export possibility to m_bmp, .jpg, .csv		
Data storage device	SD card		
Store capacity	1 GB (approx. 800-1.000 images)		
Optics			
Standard lens (32")	yes		
Telephoto lens (12")	no	yes, optional	
Laser measurement spot marking			
Classification of laser	635nm, Class 2		
Current supply			
Battery type	Fast charging, Li-ion battery, chargeable on site		
Operating time	approx 5 h at 20 °C		
Charging options	in instrument/charger (optional)		
Mains operation	yes		
Output voltage	5 V		
Ambient conditions			
Operating temperature range	-15 to +40 °C		
Storage temperature range	-30 to +60 °C		
Air humidity	20 % to 80 % non-condensing		
Protection class of housing	IP54		
Physical characteristics			
Weight	900 g		
Dimensions	152 x 106 x 262 mm		
Input mounting	yes		
Housing	ABS		
PC software			
System requirements	Windows XP (Service Pack 2), Windows Vista		

Ordering information

	Order code	testo 880-1 0563 0880 V1	testo 880-2 0563 0880 V2	testo 880-3 0563 0880 V3	testo 880-3 Pro-Set 0563 0880 V4
Included as standard					
Lens protection glass	C1	●	●	●	●
Telephoto lens	A1	–	●	●	●
Additional battery	D1	●	●	●	●
Fast charger	E1	●	●	●	●
Sunshield	F1	●	●	●	●
Humidity measurement	B1	–	–	●	●

All imagers are delivered in a robust case including SD card, USB cable, software, mains unit and adapter plate for tripod mounting.

● Standard ● Optional – Not available

Accessories

Part no. Price £

Aluminium tripod

Professional, extremely light and stable aluminium tripod with quick release legs and 3-way tripod head

0554 8804 159.00

IR protective glass

Special germanium protective glass for protection against dust and scratches

0554 8805 179.00

Additional battery

Additional Li-ion battery to prolong operating time

0554 8802 68.00

Fast charger

Desktop fast charger for two batteries to optimize charging time

0554 8801 139.00

Sunshield

Special sunshield for the display of the testo 880 in bright surroundings

0554 8806 32.00

Retrofit telephoto lens

(for testo 880-2 and -3)

On request

Adhesive tape

Adhesive tape e.g. for reflective surfaces (roll, L.: 10 m, B.: 25 mm), E=0.95

0554 0051 57.00

ISO calibration certificate for testo 880

Calibration points at 0 °C, 25 °C, 50 °C in measuring range -20 °C to 100 °C

0520 0489 On request

Calibration points at 0 °C, 100 °C, 200 °C in measuring range 0 °C to 350 °C

0520 0490 On request

Freely selectable calibration points in the range -18 °C to 250 °C

0520 0495 On request





Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



UK Office

Keison Products,

P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.

Tel: +44 (0)330 088 0560

Fax: +44 (0)1245 808399

Email: sales@keison.co.uk

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.