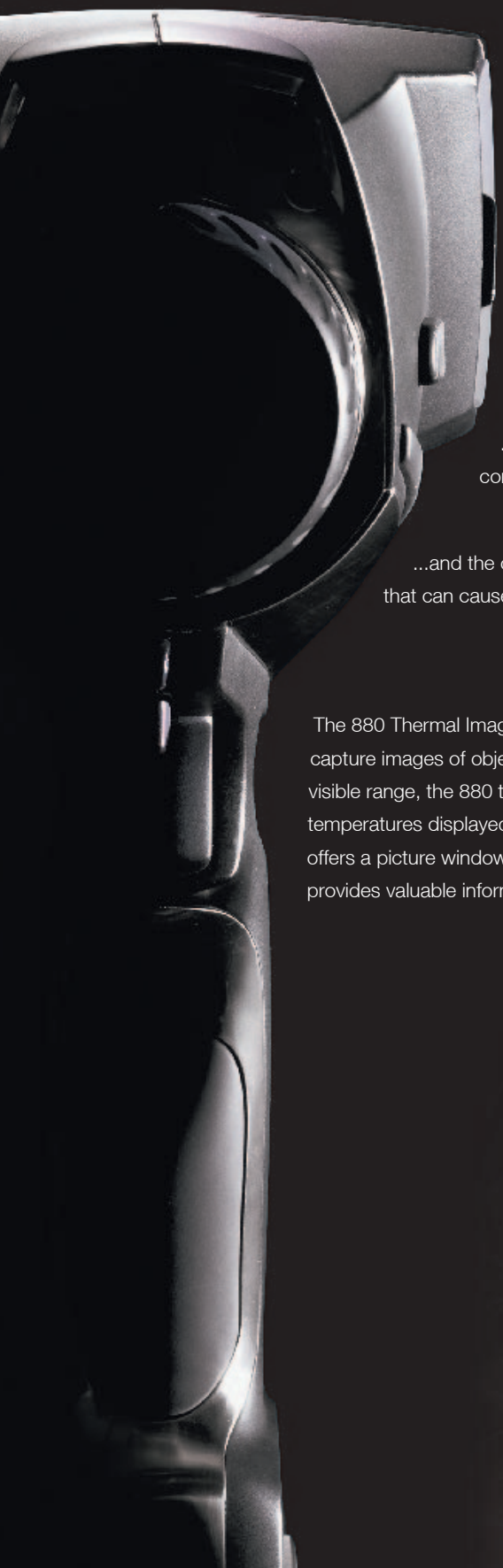
Committing to the future

See more with the thermal imager **testo 880**

Now with:
Special Report writing software for all models.

880 Thermal Imager



The 880 Thermal Imager is an innovative new imager/camera that lets you actually see heat...

...the heat that bleeds through walls, doors, and windows due to poor construction, insulation or design

...and the heat from a faulty electical connection about to fail

...and the heat of friction in a failing bearing of a motor or compressor

...and the cooling created by moisture trapped behind a wall or under a floor that can cause mold growth...and more!

The 880 Thermal Imager allows the user to see beyond the range of visible light and to capture images of object temperatures. Even thought infrared (IR) energy is outside the visible range, the 880 thermal imager detects IR signatures and enables you to see temperatures displayed in real-time images. The dramatic extra-large display of the 880 offers a picture window on a previously unseen world. The image you hold in your hand provides valuable information about imminent damage and lets you plan repairs.

Capture what you couldn’t see!

The latest technological advances are readily apparent in the imaging capabilities of the 880 Thermal Imager. Unsurpassed sensitivity (<0.1°C NETD) detects even the smallest temperature differences. Image interpolation to 320 x 240 pixels creates a vibrant presentation on screen and in reports.

Interchangeable lenses and motorized focusing are features unique to the 880 in its class. With a 5-way joystick to navigate the drop down menu selections, two user defined function keys, and single handed operation, using the 880 couldn’t be easier.

Store the thermal images in user defined folders in memory. Digital photos provide clear identification of the measurement site. Download the thermal image and digital photo into the report software. User friendly format generates quick and easy professional client reports.

Building applications

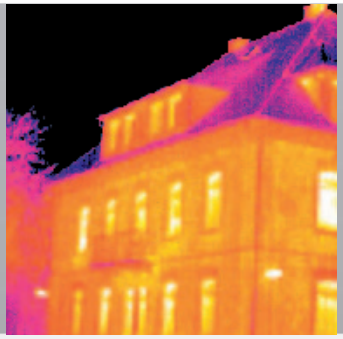
“See” behind surfaces

Telltale heat signatures on surfaces could be indications of leaking air or water. Survey floors, walls, ceilings, and roofs to spot thermal anomalies. Subfloor radiant heating systems can be checked for leaks or blockages, or scanned to pinpoint the location of coils. The 880 sees if heat is where it belongs, or if it is escaping.

Mold growth

Wet areas, whether the result of rain water intrusion, plumbing leaks, or condensation, are breeding grounds for mold, particularly inside wall cavities and other areas that aren’t exposed to light. The 880 will clearly identify the damp spots and point the way toward corrective measures. A thermal imager, with the exceptional temperature resolution of <0.1°C, like the 880 gives you, is the ideal tool to detect what is hidden from most other diagnostic instruments. Enjoy the confidence the 880 gives you for making accurate damage assessments and repair recommendations.

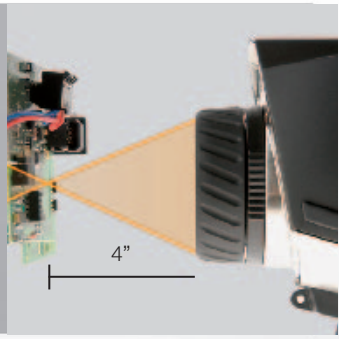
1 Exceptional image quality with full-screen display



Outstanding image quality ensures accurate diagnoses, even for the smallest temperature differences

Integrated digital camera with power LEDs eliminates dark areas

Dynamic motor focus for one-hand operation



Very short mimimum focus distance of approx. 4” for small objects

(33Hz) Ergonomic design

Thermal resolution <0.1°C

3.5” screen, 320 x 240 pixels

880 Thermal Imager

With a thermal resolution < 0.1 °C, and the image interpolation to 320 x 240 pixels, the 880 delivers high definition images which satisfy even the most demanding user. A wide angle and an optional telephoto lens enable adaptation to the different sizes and distances of measurement objects. The optimal image presentation is assured by the high-quality germanium optics.

The 880, with an integrated digital camera and image-in-image function, saves and links IR and visual images with a pull of the trigger.

The user identified file structure reduces the administrative effort for managing the images and accessing them in the professional processing and reporting software. The software is included with every imager.

3 Professional Report Writer

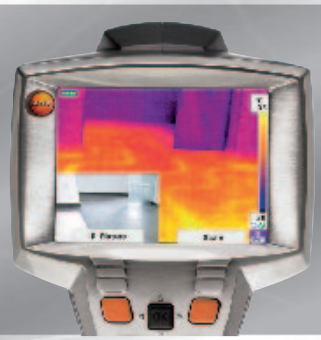
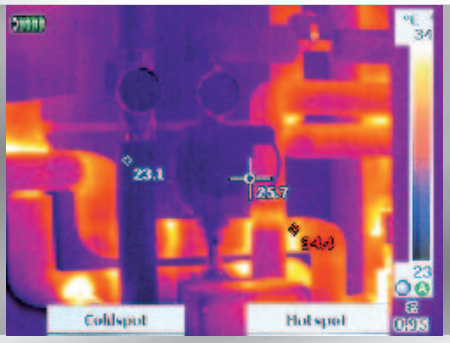


Image-in-image function for easier orientation and simple documentation



Two-point measurement for precise calculation of temperature differences

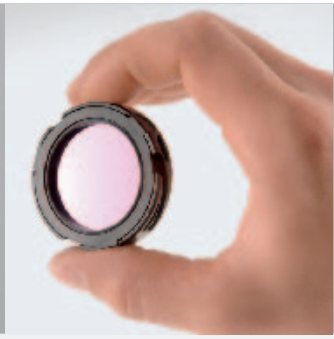
Integrated report creation makes documentation quick and easy

2 Easy to operate

Not available in the USA

Dynamic motor focus

Interchangeable lens for ultimate versatility

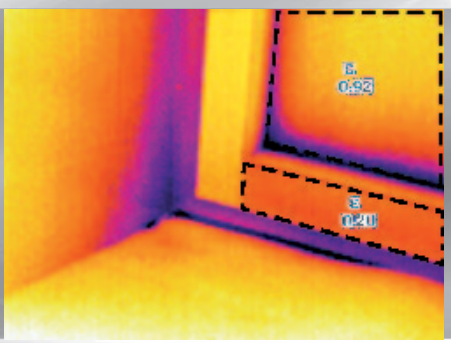


The IR protective lens shields the optics from dust and scratches

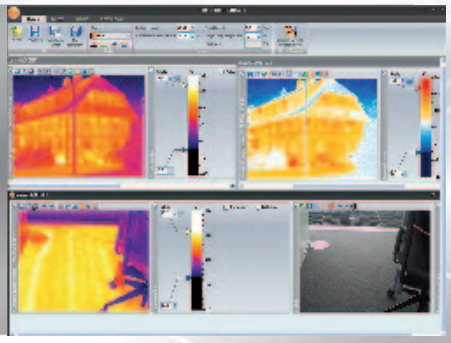
USB connection

SD card

Programmable fast selection buttons

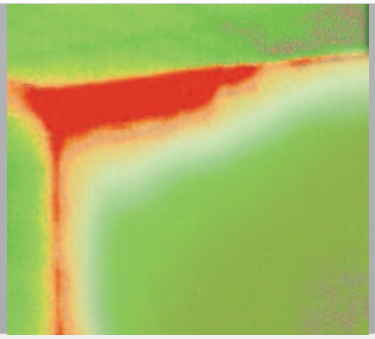


Adjustment of emissivity by area for more accurate temperature analysis

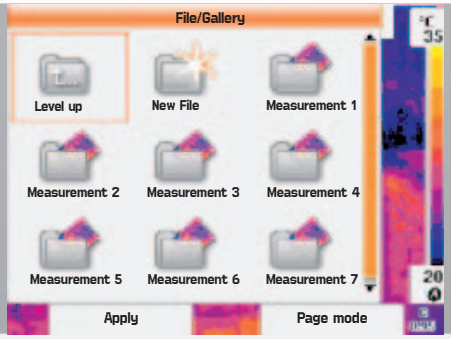


Simultaneous evaluation and comparison of several images

Joystick operation easily navigates through menu and image gallery



Clearly identify damp spots before they become mold problems



Convenient file management for creating inspection plans

Intuitive menu structure

All models include report writing software

Building envelope

Use the 880 to scan the building shell from inside and out. It easily recognizes heat loss around windows, doors, and sill plates due to faulty insulation or poor sealing and documents it with the special software. The professional image processing and reporting software is included with every 880. Use the 880 to enhance building energy audits and provide proof positive to you and your clients of the problem areas. The standard lens has a wide field of view (32°) and is ideally suited to all building applications.
Multi-page thermography reports can be created with the new PC software.
Special layout templates for reports according to DIN EN 13187 are also stored in the PC software for detailed (or simplified) tests.

An overview

testo 880-1

The basic imager with fast fault-finding and quality images

- Integrated digital camera
- High quality wide angle lens (32° x 24°) with F1 optics
- Detector 160 x 120
- NETD <0.1°C
- Manual focus
- Minimum focus distance 4”
- Data storage device SD, 1 GB for approx. 800-1000 images

Includes
- IR software with integrated report creation
- USB cable
- Li-Ion Battery
- High quality, rugged case

testo 880-1

Part no. 0563 0880 V1

testo 880-3

The expert's thermal imager for a complete analysis with visual image documentation of buildings, electrical systems and machinery

The testo 880-1 imager plus:
- Power LEDs
- Dynamic motor focus
- Optional interchangeable telephoto lens
- Protective lens
- Two moveable temperature measurement spots

testo 880-3

Part no. 0563 0880 V3

All cameras are delivered in a robust case incl. pro software, SD card, USB cable, mains unit, Li-ion batteries and an adapter for tripod mounting.

Thermography seminars: Learn more. Know more. See more.

Testo offers thermography seminars and webinars with industry leading, qualified experts. Flexible training sessions are available in one, two, and four day seminars and conclude with a certification exam. Tailored sessions can be held on site for larger training groups. Practical exercises and helpful instruction are utilized in all the application modules, coupled with an overview of infrared measurement technology. For more information or registering for a thermography seminar in your area contact testo directly or visit www.testo.us/880

testo 880-3 Expert Kit

Full featured thermal imager with unbeatable option package

The testo 880-3 Expert Kit also includes:
· Telephoto lens
· Additional battery
· Fast charger
· Sunshield

testo 880-3 Expert Kit

Part no. 0563 0880 V4

Ordering information

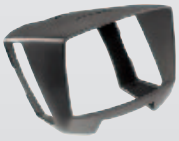
	Ordering code	testo 880-1 0563 0880 V1	testo 880-3 0563 0880 V3	testo 880-3 Expert Kit 0563 0880 V4	
Additionally in case					
Protective lens	C1	●	●	●	
Telephoto lens	A1	–	●	●	
Additional battery	D1	●	●	●	
Fast charger	E1	●	●	●	
Sunshield	F1	●	●	●	

All imager kits include a rugged case with SD card, USB cable, software, power supply and adapter plate for tripod mounting

● Standard ● Optional – Not available

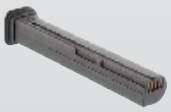
Accessories	Part no.
Aluminum tripod Professional, extremely light and stable aluminium tripod with quick release legs and 3-way tripod head	0554 8804
Protective lens Special protective glass made of germanium, for optimum protection against dust and scratches	0554 8805
Additional battery Additional Lithium-ion battery to prolong operating time	0554 8802
Fast charger Desktop charger holds two batteries	0554 8801
Sunshield Special sunshield for the display cuts back glare in bright surroundings	0554 8806
Retrofit telephoto lens (for 880-3); please contact our customer service	
Adhesive tape Adhesive tape for reflective surfaces (roll, L.: 10 m, B.: 25 mm), E=0.95 heatproof up to +572°F	0554 0051
ISO calibration certificate for testo 880	
Calibration points at 0 °C, 25 °C, 50 °C from -20 °C to 100 °C (-4 to 212°F)	0520 0489
Calibration points at 0 °C, 100 °C, 200 °C from 0 °C to 350 °C(32 to 662°F)	0520 0490
Selectable calibration points from -18 °C to 250 °C(0 to 482°F)	0520 0495

Fast charger



Sunshield

Protective lens



Additional battery

Aluminum tripod

Technical data

	testo 880-1		testo 880-3
Image specifications			
Infrared			
Optical field/min. focus distance	32° x 24° / 0.1 m (4") (standard lens), 12° x 9° / 0.6 m (24")(telephoto lens)		
Thermal sensitivity (NETD)	<0.1 °C at 30 °C (76°F)		
Geometric resolution	3.5 mrad (standard lens), 1.3 mrad (telephoto lens)		
Image refresh rate	9 Hz	33 Hz	
Focus	manual		manual + motorized
Detector type	Detector 160 x 120 pixels		
Spectral range	8 to 14 µm		
Visual			
Optical field/min. focus distance	33.2° x 25.2° / 0,4 m		33.2° x 25.2° / 0.4 m; (16")
Image size	640 x 480 Pixel		640 x 480 Pixel
Image refresh rate	8 ... 15 Hz		8 ... 15 Hz
Image presentation			
Image display	3.5" LCD with 320 x 240 Pixel		
Display options	IR image only / real image only / IR and real image (picture in picture)		IR image only / real image only / IR and real image (picture in picture)
Video output	USB 2.0		
Video stream	9 Hz	25 Hz	
Color palettes	8 options		
Measurement			
Temperature range	-20 to +100 °C; (-4 to 212°F) 0 to +350 °C (switchable); (32 to 662°F)		
Accuracy	±2 °C, ±2% of rdg.		
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 sec.		
Measurement functions	Standard measurement 1-point or 2-point measurement		
Reflected temperature compensation	manual		
Setting emissivity	Nine materials programmable, of which one user-defined (0.01 - 1.0)		
Image storage			
File format	.bmt; export into .bmp, .jpg, .csv		
Data storage device	SD card		
Store capacity	1 GB SD card (holds 1000 images)		
Optics			
Standard lens (32°)	yes		
Telephoto lens (12°)	no	optional	
Current supply			
Battery type	Fast charging, Li-Ion battery, field replaceable		
Operating time	approx 5 h at 20°C ; (68°F)		
Charging options	in instrument/charger (optional)		
Power supply	yes		
Output voltage	5 V / 4 A		
Ambient conditions			
Operating temperature range	-15 to +40 °C; (5 to 104°F)		
Storage temperature range	-30 to +60 °C; (-22 to 140°F)		
Air humidity	20 % to 80 % non-condensing		
Protection class of housing	IP54 / NEMA 33		
Physical characteristics			
Weight	900 g; (2 lbs.)		
Dimensions	152 x 106 x 262 mm; (6" x 4.2" x 10.3")		
Tripod mounting	yes, with adapter, included in delivery		
Housing	ABS, diecast zinc		
PC software			
System requirements	Windows XP, Windows Vista		
Norms, tests, warranty			
Warranty	2 years		

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