

Thermal imager

testo 860i – wireless thermal imager for smartphones with easy operation and display via the testo Smart App

Simple and fast determination of Delta T in the thermal image using application-specific DeltaHeat and DeltaCool measurement functions

Razor-sharp thermal images thanks to high infrared resolution (256 x 192 pixels)

Everything is simple with the testo Smart App: easy operation and effortless documentation with on-site emailing

Flexible handling through wireless use or one-handed operation directly attached to a smartphone

High suitability for everyday use and robustness with IP54 and fall protection up to 1.5 m



testo Smart App
for free download



The new wireless thermal imager for smartphones testo 860i with its simple operation and display in the testo Smart App making it the perfect choice for quick spot checks in the HVAC trade, maintenance, buildings and many other applications.

testo 860i enables quick and easy determination of Delta T (differential temperature) in the thermal image using application-specific measurement functions: **DeltaHeat** for quick determination of the spread of flow and return temperatures on radiators, **DeltaCool** for quickly establishing the differential temperature in refrigeration and air conditioning systems.

The **humidity mode** function helps to assess the risk of mould indoors. The thermography measurement function shows hotspots and Delta T quickly and easily during maintenance.

The testo Smart App is used to operate testo 860i, display the thermal image and differential temperature, and document – it's simple, quick and smart. testo 860i is versatile and can be used one-handed either directly attached to a smartphone or tablet, or separately. What's more, its high suitability for everyday use, robustness and rechargeable lithium battery with a long operating time make the testo 860i a reliable companion.

Order data

testo 860i

Wireless thermal imager for smartphones with simple operation and display via the testo Smart App, including a USB-C cable and cardboard packaging

Order no. 0560 0860



testo 860i kit

Wireless thermal imager for smartphones with simple operation and display via the testo Smart App, including a bag for safe transport, a USB-C cable and cardboard packaging

Order no. 0563 0860



Always in the picture – with the testo Smart App

The testo Smart App makes sharp thermal images easier than ever:

- Fast connection of testo 860i to smartphones or tablets
- Clear display of thermal images and simple processing in the thermography measurement program
- Three application-specific optimised measuring programs: DeltaHeat for quickly determining the spread in flow and return temperatures on radiators, DeltaCool for determining the difference in refrigeration and air conditioning systems and humidity mode for assessing the risk of mould in buildings
- Storage of thermal images
- Integration of readings from Testo clamp meter, thermohygrometer and other Testo measuring instruments connected to the testo Smart App, e.g. Smart Probes and manifolds
- Documentation by directly sharing the images or creating and sending a report as a PDF



The testo Smart App is your universal app for all applications:

HVAC/R systems

Refrigeration, air conditioning and ventilation systems, heating systems and heat pumps

Industry services and facility management

Monitoring of temperature, ambient and indoor climate

Food safety (HACCP)

Checking of frying oil quality and temperature

Your advantages for all applications:

- Compatible with many Testo measuring instruments
- Measurement programs for many applications
- Configuration, execution and monitoring of measurements
- Storage of measurement, measuring location and customer data
- Documentation including the creation and sending of the measurement report
- Useful premium add-on functions available (subject to charge)

Technical data

Infrared image output	
Infrared resolution	256 x 192 pixels
Thermal sensitivity (NETD)	50 mK
Field of view (VFOV/HFOV)/ min. focusing distance	48° x 36° / 0.3 m
Geometric resolution (IFOV)	3.3 mrad
Image refresh rate	9 Hz
Focus	Fixed
Spectral range	8 to 14 µm
Visual image output	
Image size / min. focusing distance	640 x 480 pixels / 0.4 m
Measurement	
Measuring range	-20 to +350 °C
Accuracy	±2 °C / ±2% of measured value (at 18 to 25 °C ambient temperature and object temperature >0 °C), otherwise ±3 °C / ±3%
Emissivity/reflected temperature adjustment	0.01 to 1 / manual (via testo Smart App)
Measurement functions (in the testo Smart App)	
Analysis functions	Hot/cold spots, Delta T, up to 10 selectable individual measuring points, area measurement (min./max. on area)
Application-specific measurement functions	DeltaHeat, DeltaCool, humidity mode
Humidity mode – manual	Yes
Humidity measurement with humidity measuring instrument	Automatic transfer of the optional testo 605i or testo 625 thermohygrometer readings via Bluetooth to the testo Smart App
Electrical mode – manual	Input of current, voltage or power
Electrical measurement with clamp meter	Automatic reading transfer of the optional testo 770-3 clamp meter via Bluetooth to the testo Smart App
Image presentation (in the testo Smart App)	
Display options	IR image, real image (overlay in IRSof possible)
Fullscreen mode	Yes
Colour palettes	Iron, rainbow, rainbow HC, cold-hot, blue-red, grey, inverted grey, sepia, Testo, iron HT, humidity palette
Digital zoom	Yes
General app functions	
File format	Share saved images as .bmt (for editing in IRSof), .jpg, and .csv files with the testo Smart App
Image storage	On a mobile device
Remote-controlled operation	Up to 10 m from the mobile device (via WLAN)
Power supply	
Battery type	Integrated Li-ion rechargeable battery

Battery life	2 hours
Charging interface	USB-C
Charging time	Approx. 90 min 15-min charge of an empty battery equals 30 min of operating time
Ambient conditions	
Operating temperature range	-10 to +50 °C
Storage temperature range	-20 to +70 °C
Air humidity	5 to 95 %RH, non-condensing
Housing protection class (IEC 60529)	IP54
Impact resistance test	1.5 m
Vibration	IEC 60068-2-6
Physical features	
Weight	195 g
Dimensions	165 x 45 x 38 mm
Mobile device attachment	Clip span: min. 120 mm, max. 170 mm and device depth up to max. 12 mm
Tripod socket	1/4" UNC thread
Compatibility	
testo Smart App	Requires iOS 17 or later/Android 14 or later Requires mobile terminal device with Bluetooth 4.0
PC software testo IRSof	Windows 11, Windows 10
Data interface	
WLAN*	Communication with the testo Smart App; WLAN: IEEE 802.11b/g/n
Bluetooth*	Peer-to-peer advertising for fast connection set-up
Standards, tests	
Standards	Declaration of conformity: See www.testo.com/eu-conformity

* An overview of the radio authorisations in the different countries can be found in the download section of the testo 860i product page in the "Quick Start Guide testo 860i" document.