

# Thermal imager

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

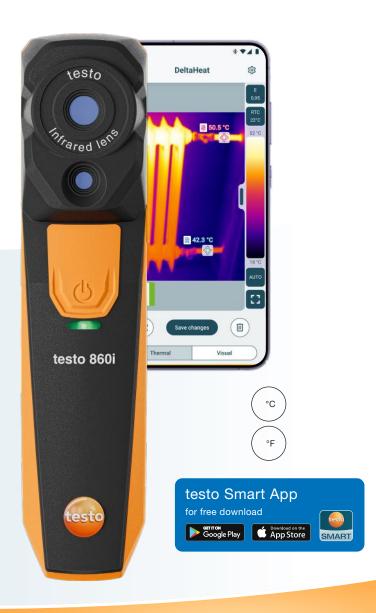
Wirelessly connects to your mobile device for fast inspections with the Testo Smart App

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

Full Radiometric Temperatures and DeltaT, DeltaHeat, DeltaCool to speed analysis

Flexibility designed in, use one-handed or clipped directly to your device

IP54 and Drop Tested (5 ft) for everyday field use.



The new testo 860i wireless thermal imager for smart devices gives users simple operation and display paired with 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 measurements of Delta T (differential temperature) in the thermal image using application-specific measurement functions: DeltaHeat for quick readings of supply and return temperatures on heating type appliances, DeltaCool for quickly establishing the differential temperature in refrigeration and air conditioning systems.

The testo Smart App is used to operate the testo 860i, display the thermal image and differential temperature, and document findings—it's simple, quick, and smart. The testo 860i is versatile and can be directly attached to a smartphone or tablet or used one-handed separately. Designed for everyday field use, with durability, portability, and a rechargeable lithium battery with a 2-hour operating time, the testo 860i is a reliable companion that can see what we cannot see.



## 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 01



### testo 860i kit

Wireless thermal imager for smartphones with simple operation and display via the testo Smart App, including a bag for safe transport.

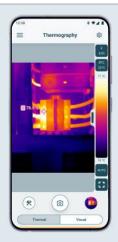
a USB-C cable and cardboard packaging

Order no. 0563 0860 01



\* testo 860i carry case accessory available seperately Order no. 0554 8600

## 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 mold 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, heat pumps, and IAQ  $\,$ 

#### **Industry Services and Facility Management**

Thermal Imaging of Electrical, Mechanical, and Process Equipment to maximize reliability and safety

### **Building Diagnostics**

Find Water Leaks, Air Leaks, and Missing Insulation in building envelopes

### 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 resolution Thermal sensitivity (NETD) Thermal sensitivity Thermal sensitivity (NETD) Thermal sensitivity The	Infrared image output		
NETD    Section   Sectio	Infrared resolution	256 x 192 pixels	
Geometric resolution (IFOV) Image refresh rate  Geometric resolution (IFOV) Image refresh rate  Pocus  Fixed Spectral range  8 to 14 µm  Visual image output Image size / min. focusing distance  Measurement Measuring range  -4 to +662 °F (-20 to +350 °C)  Accuracy  ±3 °C (5.4°F) or ±3 % of m.v. (at ambient temp10 to 40 °C (14°F to 104°F) and scene temp. 0 to +150 °C (32°F to 302°F) or +100 to +350 °C (212°F to 662°F)  Emissivity/reflected temperature adjustment  Measurement functions  Measurement functions  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  Humidity mode – manual  Humidity measurement with humidity measuring instrument  Electrical mode – manual  Electrical measurement with clamp meter  Automatic transfer of the optional testo 605i or testo 625 thermohygrometer readings via Bluetooth to the testo Smart App  Input of current, voltage or power  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  Fullscreen mode  Yes  Color palettes  Iron, rainbow, rainbow HC, cold-hot, blue-red, grey, inverted grey, sepia, Testo, iron HT, humidity palette  Digital zoom  Yes  General app functions  Share saved images as .bmt (for editing in IRSoft)jpg, and .csv files with the testo Smart App	•	50 mK	
Image refresh rate	HFOV)/ min. focusing	48° x 36° / 1 ft	
Focus Fixed  Spectral range 8 to 14 µm  Visual image output  Image size / min. focusing distance 0.4 m  Measurement  Measuring range -4 to +662 °F (-20 to +350 °C)  Accuracy ±3 °C (5.4°F) or ±3 % of m.v. (at ambient temp10 to 40 °C (14°F to 104°F) and scene temp. 0 to +150 °C (32°F to 302°F) or +100 to +350 °C (212°F to 662°F)  Emissivity/reflected temperature adjustment  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  Humidity mode - Session measurement with humidity measuring instrument  Humidity measurement with consideration or testo 625 thermohygrometer readings via Bluetooth to the testo Smart App  Input of current, voltage or power manual  Electrical measurement with clamp meter with clamp meter and 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  Fullscreen mode Yes  Color 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 IRSoft), .jpg, and .csv files with the testo Smart App		3.3 mrad	
Spectral range   8 to 14 µm	Image refresh rate	9 Hz	
Visual image output   Image size / min.   640 x 480 pixels / 0.4 m	Focus	Fixed	
Image size / min. focusing distance	Spectral range	8 to 14 μm	
Measurement	Visual image output		
Accuracy  Accura	•	· ·	
Accuracy  #3 °C (5.4°F) or ±3 % of m.v. (at ambient temp10 to 40 °C (14°F to 104°F) and scene temp. 0 to +150 °C (32°F to 302°F) or +100 to +350 °C (212°F to 662°F)  Emissivity/reflected temperature adjustment  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  Humidity mode – manual  Humidity measurement with humidity measuring instrument  Electrical mode – manual  Electrical mode – manual  Electrical measurement with clamp meter  Automatic transfer of the optional testo 605i or testo 625 thermohygrometer readings via Bluetooth to the testo Smart App  Input of current, voltage or power  Mutomatic 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  Fullscreen mode  Yes  Color 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 IRSoft), .jpg, and .csv files with the testo Smart App	Measurement		
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individual measuring points, area measurement (min./max. on area)  Application-specific measurement functions  Humidity mode – manual  Humidity measurement with humidity measuring instrument  Electrical mode – manual  Electrical measurement with clamp meter  Electrical measurement with clamp meter  Electrical mode – manual  Electrical measurement with clamp meter  Electrical measurement with clamp meter via Bluetooth to the testo Smart App  Image presentation (in the testo Smart App)  Elisplay options  Fullscreen mode  Fullscreen mode  Yes  Color 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 IRSoft), .jpg, and .csv files with the testo Smart App	Measurement functions (in the testo Smart App)		
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Humidity measurement with humidity measurement manual  Electrical mode – Input of current, voltage or power manual  Electrical measurement with clamp meter  Electrical measurement with clamp meter via Bluetooth to the testo Smart App  Image presentation (in the testo Smart App)  Elisplay options  Fullscreen mode  Fullscreen mode  Fullscreen mode  Yes  Eron, 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 IRSoft), .jpg, and .csv files with the testo Smart App		DeltaHeat, DeltaCool, humidity mode	
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manual  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  Fullscreen mode  Color 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 IRSoft), .jpg, and .csv files with the testo Smart App	with humidity measuring	or testo 625 thermohygrometer readings via	
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General app functions  File format  Share saved images as .bmt (for editing in IRSoft), .jpg, and .csv files with the testo Smart App	Color palettes	grey, inverted grey, sepia, Testo,	
File format  Share saved images as .bmt (for editing in IRSoft), .jpg, and .csv files with the testo Smart App	Digital zoom	Yes	
in IRSoft), .jpg, and .csv files with the testo Smart App	General app functions		
Image storage On a mobile device	File format	in IRSoft), .jpg, and .csv files with the testo Smart App	
	Image storage	On a mobile device	

Remote-controlled operation	Up to 32ft (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	14 to 122 °F (-10 to +50 °C)	
Storage temperature range	-4 to 140 °F (-20 to +70 °C)	
Air humidity	5 to 95 %RH, non-condensing	
Housing protection class (IEC 60529)	IP54	
Impact resistance test	5 ft (1.5 m)	
Vibration	IEC 60068-2-6	
Physical features		
Weight	6.9oz (195 g)	
Dimensions	6.5 x 1.7 x 1.5 in	
Mobile device attachment	Clip span: min. 4.72 in, max. 6.7 in and device depth up to max5 in	
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 IRSoft	Windows 11, Windows 10	
Data interface		
WLAN*	Communication with the testo Smart App; WLAN: IEEE 802.11b/g/n	
Bluetooth*	Peer-to-peer for fast connection set-up	

<sup>\*</sup> 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.