



Your First Step to

# Professional Thermography



### **Accurate Temperature Measurement**

Precision at your fingertips – Perfect focus for flawless temperature readings.

- Manual focus, ensures concise measurement at all distances.
- 49° wide angle shot, to always see the big picture. Help you infer the root of the thermal anomaly.
- 40mk thermal sensitivity, unveil subtle flaws. A damp spot never escapes your sight.

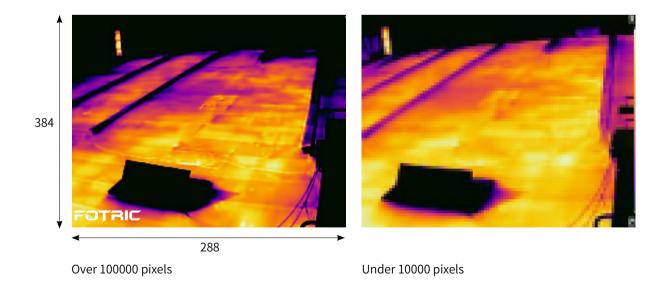


40mk thermal sensitivity reveal every anomaly

### **Superior Image Quality**

Image quality is more about aesthetics, but directly impacts the quality of your presentation.

- 384\*288 thermal pixels, presenting your findings with unprecedented clarity.
- Super resolution, boost the performance to expert level.
- TEF-Fusion 0~100% adjustable transparency. Select the best way present your finding.
- Touch span to highlight the anomaly against the environment.





### **Robust and Intuitive Design**

A perfect combination of ruggedness ingenuity.

- Function shortcut button, tailor what the camera does to what you need.
- Spacious 3.5" LCD touch screen that enable both screen and button operation.
- 8MP industrial grade digital camera, enables flawless inspection result presentation.
- Dust and water resistant (IP54), made for durability and industrial adaptability.

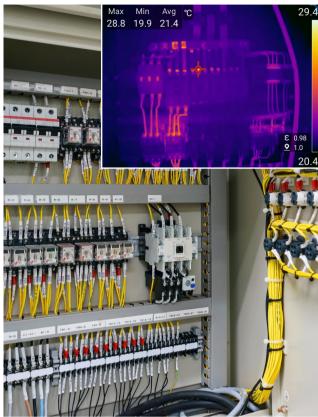
### **Unparallel Response Speed**

Your thermal camera should never slow you down. It's all about user experience.

- Powered by Android, it flows as smoothly as your smartphone.
- Fluent remote control with every operation system (Windows, MacOS, Android, IOS), so you can access your work from everywhere.

## **Applications**









# **Specifications**

Model	FOTRIC TK7
Core Parameters	
Thermal Resolution	382*288
Super Resolution(SR)	764*576
Thermal Sensitivity (NETD)	40mk(0.04° C)@30° C
Field of View (FOV)	49° x 36.8°
IFOV with Standard Lens (spatial resolution)	2.27 mrad
	f7.5
f-number (Focal length)	17
Minimum Focus Distance	0.1m  Focus free and manual focus
Focus Mode	
Spectral Range	~7-14µm
IR Detector Type	Uncooled FPA infrared detector
Detector Pitch	17μm
Al programmable Key	Support, for function shortcut
T-DEF ™ Thermal and visible light Image fusion	Support, thermal and visible light image fusion, transparency 0% ~100%
Picture in Picture	Support, resizable and movable
TWB <sup>™</sup> Histogram thermal color display	Support
IRExplorer	Support, cross plaform data transmission and remote control system
Build-in Digital Camera	8 MP industrial camera
LED Flash Lamp	Support
Frame Rate	30Hz
Temperature Analysis	
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Temperature Range	-20 ° C ~350° C
	-20 $^{\circ}$ C $^{\sim}$ 350 $^{\circ}$ C $\pm$ 2 $^{\circ}$ C or 2% , whichever is greater (at 25 $^{\circ}$ C ambient temperature)
Temperature Range	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity,
Temperature Range Measurement Accuracy	$\pm 2^{\circ}$ C or 2% , whichever is greater (at 25 $^{\circ}$ C ambient temperature)
Temperature Range Measurement Accuracy Measurement Parameters	±2 ° C or 2% , whichever is greater (at 25 ° C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise Image Display	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4  Yes
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise Image Display Display Screen	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4  Yes  3.5 inch Touch Screen
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise Image Display Display Screen Image Mode	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4  Yes  3.5 inch Touch Screen  Thermal image、Visible light、Picture in Picture & T-DEF ™
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise Image Display Display Screen Image Mode Palettes	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4  Yes  3.5 inch Touch Screen  Thermal image、Visible light、Picture in Picture & T-DEF™  8 Palettes, 8 Inverted Palettes
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise Image Display Display Screen Image Mode Palettes Isothermal Alarm/Color Alarm Temperature Span Mode	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4  Yes  3.5 inch Touch Screen  Thermal image、Visible light、Picture in Picture & T-DEF ™  8 Palettes, 8 Inverted Palettes  Yes, Above, Below, and Interval  Automatic; Manual; Touch
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise Image Display Display Screen Image Mode Palettes Isothermal Alarm/Color Alarm Temperature Span Mode Minimum Temperature Span	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4  Yes  3.5 inch Touch Screen  Thermal image、Visible light、Picture in Picture & T-DEF™  8 Palettes, 8 Inverted Palettes  Yes, Above, Below, and Interval  Automatic; Manual; Touch  Auto:3°C, Manual and Touch:2°C
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise Image Display Display Screen Image Mode Palettes Isothermal Alarm/Color Alarm Temperature Span Mode	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4  Yes  3.5 inch Touch Screen  Thermal image、Visible light、Picture in Picture & T-DEF ™  8 Palettes, 8 Inverted Palettes  Yes, Above, Below, and Interval  Automatic; Manual; Touch
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise Image Display Display Screen Image Mode Palettes Isothermal Alarm/Color Alarm Temperature Span Mode Minimum Temperature Span Info Display Max and Min Point Tracing	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4  Yes  3.5 inch Touch Screen  Thermal image、Visible light、Picture in Picture & T-DEF ™  8 Palettes, 8 Inverted Palettes  Yes, Above, Below, and Interval  Automatic; Manual; Touch  Auto:3°C, Manual and Touch:2°C  Max; Min; Avg; Measurement parameters  Support
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise Image Display Display Screen Image Mode Palettes Isothermal Alarm/Color Alarm Temperature Span Mode Minimum Temperature Span Info Display Max and Min Point Tracing Digital Zoom	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4  Yes  3.5 inch Touch Screen  Thermal image、Visible light、Picture in Picture & T-DEF ™  8 Palettes, 8 Inverted Palettes  Yes, Above, Below, and Interval  Automatic; Manual; Touch  Auto:3°C, Manual and Touch:2°C  Max; Min; Avg; Measurement parameters
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise Image Display Display Screen Image Mode Palettes Isothermal Alarm/Color Alarm Temperature Span Mode Minimum Temperature Span Info Display Max and Min Point Tracing	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4  Yes  3.5 inch Touch Screen  Thermal image、Visible light、Picture in Picture & T-DEF ™  8 Palettes, 8 Inverted Palettes  Yes, Above, Below, and Interval  Automatic; Manual; Touch  Auto:3°C, Manual and Touch:2°C  Max; Min; Avg; Measurement parameters  Support  1-8x, continuous
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise Image Display Display Screen Image Mode Palettes Isothermal Alarm/Color Alarm Temperature Span Mode Minimum Temperature Span Info Display Max and Min Point Tracing Digital Zoom Storage & Analysis Storage Card	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4  Yes  3.5 inch Touch Screen  Thermal image、Visible light、Picture in Picture & T-DEF™  8 Palettes, 8 Inverted Palettes  Yes, Above, Below, and Interval  Automatic; Manual; Touch  Auto:3°C, Manual and Touch:2°C  Max; Min; Avg; Measurement parameters  Support  1-8x, continuous  TF card, 32GB
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise Image Display Display Screen Image Mode Palettes Isothermal Alarm/Color Alarm Temperature Span Mode Minimum Temperature Span Info Display Max and Min Point Tracing Digital Zoom Storage & Analysis Storage Card Capture Mode	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4  Yes  3.5 inch Touch Screen  Thermal image、Visible light、Picture in Picture & T-DEF™  8 Palettes, 8 Inverted Palettes  Yes, Above, Below, and Interval  Automatic; Manual; Touch  Auto:3°C, Manual and Touch:2°C  Max; Min; Avg; Measurement parameters  Support  1-8x, continuous  TF card, 32GB  Single frame capture and Time-lapse
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise Image Display Display Screen Image Mode Palettes Isothermal Alarm/Color Alarm Temperature Span Mode Minimum Temperature Span Info Display Max and Min Point Tracing Digital Zoom Storage & Analysis Storage Card	±2 ° C or 2% , whichever is greater (at 25 ° C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4  Yes  3.5 inch Touch Screen  Thermal image、Visible light、Picture in Picture & T-DEF ™  8 Palettes, 8 Inverted Palettes  Yes, Above, Below, and Interval  Automatic; Manual; Touch  Auto:3° C, Manual and Touch:2° C  Max; Min; Avg; Measurement parameters  Support  1-8x, continuous  TF card, 32GB  Single frame capture and Time-lapse  MP4 video recording
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise Image Display Display Screen Image Mode Palettes Isothermal Alarm/Color Alarm Temperature Span Mode Minimum Temperature Span Info Display Max and Min Point Tracing Digital Zoom Storage & Analysis Storage Card Capture Mode Video Recording File Format	±2°C or 2%, whichever is greater (at 25°C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4  Yes  3.5 inch Touch Screen  Thermal image、Visible light、Picture in Picture & T-DEF™  8 Palettes, 8 Inverted Palettes  Yes, Above, Below, and Interval  Automatic; Manual; Touch  Auto:3°C, Manual and Touch:2°C  Max; Min; Avg; Measurement parameters  Support  1-8x, continuous  TF card, 32GB  Single frame capture and Time-lapse  MP4 video recording  Full radiation thermal photo(JPEG.), visible light photo, MP4 video
Temperature Range Measurement Accuracy Measurement Parameters Measurement Tools Delta T/Temperature Rise Image Display Display Screen Image Mode Palettes Isothermal Alarm/Color Alarm Temperature Span Mode Minimum Temperature Span Info Display Max and Min Point Tracing Digital Zoom Storage & Analysis Storage Card Capture Mode Video Recording	±2 ° C or 2% , whichever is greater (at 25 ° C ambient temperature)  Emissivity, Ambient Temp, Partial Emissivity, Reflected Temp, Relative Humidity, Distance, IR Window Compensation.  Spot: 6; Line: 3; Rectangle/Circle: 4  Yes  3.5 inch Touch Screen  Thermal image、Visible light、Picture in Picture & T-DEF ™  8 Palettes, 8 Inverted Palettes  Yes, Above, Below, and Interval  Automatic; Manual; Touch  Auto:3° C, Manual and Touch:2° C  Max; Min; Avg; Measurement parameters  Support  1-8x, continuous  TF card, 32GB  Single frame capture and Time-lapse  MP4 video recording

Voice Appetation	Support (120 seconds)
Voice Annotation  Text Annotation	Support (120 seconds)
	Support
Tags Favorite	Support Support (filter favorite files)
PC Analysis and Report Software	AnalyzIR
Data Connection Wi-Fi Connection	Cuppert 2 4CHz 9 FCH phannel Cuppert 902 11a /b /a /a /a
	Support 2.4GHz&5GH channel, Support 802.11a/b/g/n/ac
USB	USB Type-C type; USB 3.0 / 2.0 compliant, Support USB OTG Micro HDMI type, HDMI 1.4 compliant, Support 1080P imaging video streaming in
HDMI	60Hz.
Bluetooth	Support
Remote Display	Support
Remote Control	Support
Power System	
Battery	Rechargeable Li-ion, 3.6V, 5000mAh
Battery Operation Time	≥ 4 hours
Battery Charging Time	3.5 hours to full-charge by battery dock. 2.5 hours to full-charge by connect to camera.
Charging Methods	Support battery dock adaptor and Type-C interface (compatible with cell phone charger).
Auto Screen-off	Support
General Specifications	
GPS	Yes
QR code Scanning	Support
Storage Card Interface	TF Card,Support Hot-plug.
Laser Pointer	Level 2; wavelength: 635nm; Power: <1mW
Operation Temperature	-20° C to 50° C
Storage Temperature	-40° C to 70° C, without battery
Relative Humidity	<95%RH (Operation and Storage)
Safety	SELV relay (GB 4943.1/IEC60950-1)
Electromagnetic Compatibility	GB/T17626.2/IEC 61000-4-2
Vibration	2g(GB/T 2423.10/IEC 60068-2-6)
Shock	25g(GB/T 2423.5/IEC 60068-2-27)
Collision	10g(GB/T 2423.6/IEC 60068-2-29) with packing
Drop	Designed for 2 meters drop test. (GB/T 2423.8/IEC 60068-2-32)
Dimension (mm)	243 * 95 * 142
Weight (include battery)	800g
Enclosure Rating	IP54
Tripod Interface	UNC 1/4 -20 threaded hole for tripod
Warranty	1 year warranty on camera, 10 years for IR detector.
Recommended Calibration Cycle	2 years
Supported Languages	English, Spanish, Korean, Italian, Germany, Portuguese, Traditional Chinese
RoHS Compliant	Yes
Box Contents (Standard Configuration)	FOTRIC handheld thermal camera,documentations( certificate of quality, certificate of calibration, warranty card, packing list), user manual, USB-Type C cable, TF card TF card reader, power adaptor, 1 piece of battery.

# Innovation Excellence Integrity

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