FOTRIC

CONNECTING THE DIGITAL FUTURE

Scaling Excellence

Top-Tier Thermal Imaging
Ground-Level Price

FOTRIC Ti series

Robust and Versatile

TurboFocus® Intelligent Focus System

Combines thermal contrast AF, laser-assisted AF, continuous AF, touch AF, and manual focus to deliver fast, accurate, and quiet focusing. Seamlessly aligns thermal and digital images for precise analysis.

Visible light fusion thermal image (50% transparency)

Robust Design

- 2-meter drop impact resistance makes a truly enduring equipment;
- With an IP54 protection rating, this device is built for demanding industrial environments.

2-meter drop test

Meticulous Measurement Impeccable Imaging

±2%/±2°C
Accuracy

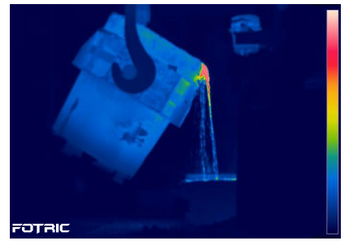
-20°C ~550°C
Measurement Range

Extraordinary Adaptability

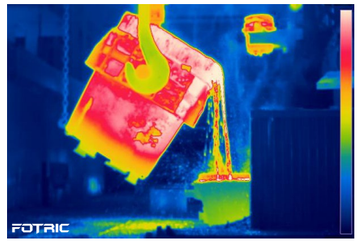
Maintains ±2% accuracy under extreme temperature and high humidity conditions.

T-TWB®

Automatically adjusts the palette ribbon based on the pixel distribution across temperature ranges, offering a clearer view of temperature distribution for more efficient inspections.



TWB OFF



TWB ON

IREdge®

Enhances object contours and edges to improve visibility and differentiation from the background.

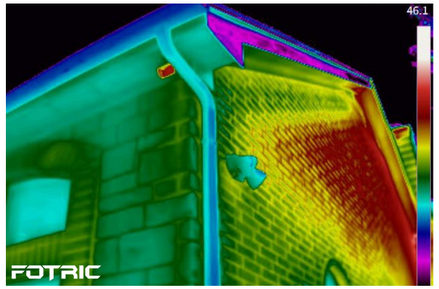
IREdge OFF

IREdge ON

Powerful Analysis, Swift Decision-making

Laser-assisted Area/Length Measurement

Equipped with a high-precision laser rangefinder, this system measures distances up to 50 meters with an accuracy of d*0.01% ± 2mm. It automatically calculates areas and lengths within the thermal image, ideal for building inspections and thermal loss assessments of large equipment.



On-device Analysis

Easily annotate images during inspections with the bookmark feature. Bookmarked images can be retrieved anytime for onboard analysis and streamlining your workflow.

Professional Analysis Software

AnalyzIR Venus software enables detailed data analysis, batch processing of inspection results, and instant report generation, enhancing the efficiency and professionalism of inspection workflows.

Specifications

Model	Ti7	Ti5
Thermal Imaging Parameters		
Infrared Resolution	640*480	384*288
Super Resolution	1280*960	768*576
IR Detector Type	Uncooled infrared focal plane detector	Uncooled infrared focal plane detector
Thermal Sensitivity（NETD)	<30mK@30°C	<40mK@30°C
Detector Pitch	17μm	17μm
Spectral Range	8~14μm	8~14μm
Image Frame Rate	30Hz	30Hz
Field of View (FOV)	44° *33°	
Spatial Resolution (IFOV)	1.2mrad	2mrad
Minimum Imaging Distance	0.1m	0.1m
Focal Length (mm)	14mm	8mm
Focus Mode	TurboFocus® system for continuous, laser-assisted, thermal contrast AF, touch AF; Manual focus	
Lens Identification	Automatic Identification	
Unique Features		
TurboFocus®	TurboFocus® Speedy Intelligent Autofocus system for continuous, laser distance, thermal contrast, and touch focus; Manual focus.	
T-DEF®	Thermal and visible light image blend, transparency 0% ~100%	
IREdge	Contour detail enhancement	
T-TWB®	Tempetrature visual representation normalization option	
Temperature Analysis		
Temperature Range	-20~120°C (-4~248 °F)，0~550°C (32~1022 °F)，Intelligent range	
Measurement Accuracy	± 2°C (3.6 °F) or ± 2 %, whichever is greater（ambient temperature at 15~35° C(59~95 °F) , target object temperature >0° C, calibration at 1 meter)	
ROI Spot	12	6
ROI Line	3	3
ROI Area	12	6
Measurement Parameters	Emissivity, Partial emissivity, Reflected temperaure, Ambient temperature, Humidity, Distance and IR window compensation.	
On-device Analysis	Support	
PC Software	AnalyzIR®	
Image Display		
Display Screen	5 inch touch screen (1280 x 720)	
Image Mode	Thermal image, Digital Camera, Picture in Picture, and T-DEF®, High sensitivity mode (only active when the lens is identified as a gas detection lens)	
Palettes	10	
Temp Span Mode	Auto (Minimum Temp Span 3°C (5.4 °F)), Manual (Minimum Temp Span 2°C (3.6 °F)), Touch-screen(Minimum Temp Span 2°C (3.6 °F).	

Specifications

Color Alarms (temperature alarms)	High temperature, low temperature, and interval isotherms	
Image Overlay	Display global max, min, avg measurement parameters	
High/Low Temperature Tracking	Yes, for both global and ROI	
Digital Zoom	1-10x, continuous	1-8x, continuous
Capture Feature		
Digital Camera	8MP industrial grade camera	
Storage Card	Micro SD card, 64G, expandable up to 1TB	
Time-lapse Capture	Set the time interval from 2 seconds to 1 hour to save the images of corresponding modes in thermal image mode (IR image, T-DEF®, Picture-in-Picture)	
Image Format	Radiometric thermal photo (JPEG.), non-radiometric digital camera photo	
Gallery	Support viewing images and videos in the gallery as icons. Support previewing images and videos in the gallery. Support thermal image analysis in the gallery. Support filtering and deleting images and videos in the gallery	
Data Connection		
WiFi	Support 2.4GHz&5GH channel，Support 802.11a/b/g/n/ac	
Bluetooth	BT4.2 LE，Support	
USB	USB Type-C type；USB 3.0 / 2.0 compliant	
HDMI	Micro HDMI type，HDMI 1.4 compliant，Support 1080P imaging video streaming in 60Hz.	
Auxiliary Features		
Software and Firmware Upgrade	Support OTA remote upgrade and SD card local upgrade	
Laser	Independent key activation; Laser level: 2; Wavelength: 635nm; Power: <1mW; Laser distance: 0.1~50m, Accuracy: d*0.01%±2mm.	
Laser-assisted Area Measurement	Support	
LED Flash Lamp	Support torch illumination and flash light mode	
Power System		
Battery	Rechargeable Li-ion, 7.4V, 3500mAh	
Battery Operating Time	⩾ 4 hours per battery(depends on the environment and workload)	
Battery Charging System	Two-bay battery charger with LED display (12V, 3A)	
Battery Charging Time	2.5 hours to 90% full charge	
Energy Management	User-selectable screen-off modes	
External Power Source	Support using DC 12V to power the device	
Reliability and Certificates		
Safety	EN 61010-1	
Electromagnetic Compatibility	EN IEC 61326-1	
Enclosure Rating	IP54(IEC 60529)	

Specifications

Drop	Engineered to withstand 2 meters (6.5 feet) drop with standard lens
Shock	25g(IEC 60068-2-27)
Vibration	2g(IEC 60068-2-6)
RoHS Compliant	Compliant
Physical Parameters	
Operation Temperature	-20~50°C (-4~122 °F)
Storage Temperature	-40~70°C (-40~158 °F) without battery
Relative Humidity (Operation and Storage)	<95%RH
Dimensions	313mm*123mm*139mm
Weight	1.0kg (lens not included)
Battery Weight	150g
Casing Material	Hard plastic: PC+ABS, Soft plastic: TPE, Magnesium alloy, Aluminum alloy
Mounting Method	Support UNC 1/4-20 interface for tripod connection
Warranty	
Warranty	2 years
Recommended Calibration Interval	2 years
Language	
Languages	English, Spanish, German, Traditional Chinese, Korean, Italian, Portuguese,Thai, French
Standard Configuration	
Packaging	Infrared thermal imager, lens, lens cover, 2 batteries, battery charger, power adapter, USB type-C to USB interface cable,micro HDMI to HDMI interface cable, SD card, SD card reader, accessory bag (wrist strap, 2 wrist strap holders, 2 M4 * 8 screws, lanyard, Allen wrench), information bag (packing list,user manual, calibration certificate, warranty card), portable soft bag, portable hard case

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