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FOTRI

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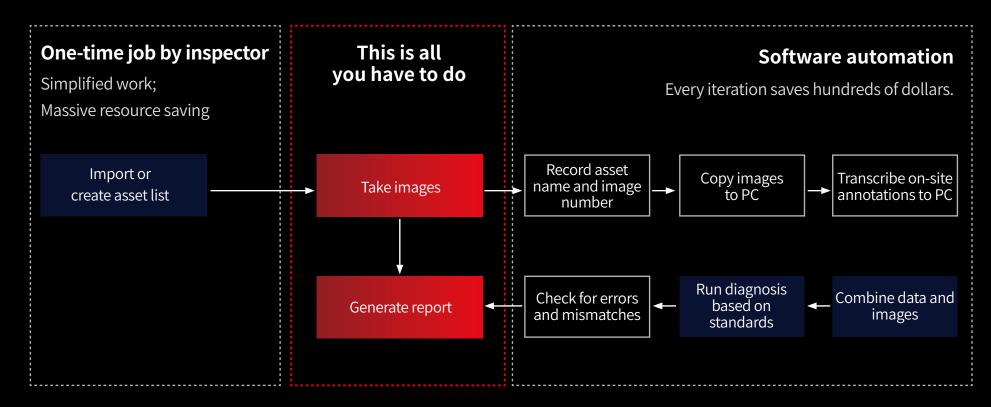
Advanced Handheld Thermal Imager

FOTRIC V series





Boost Efficiency with AI-powered Automation



Powerful Software-NaviPdM[®]

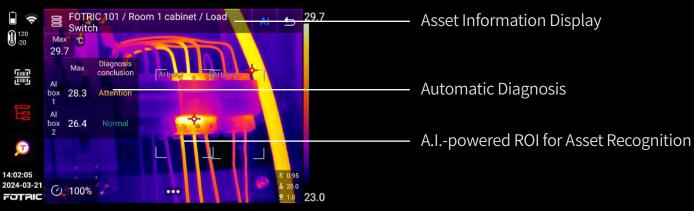


Asset Recognition

- A.I. algorithm on the camera recognizes and tracks previously inspected components with measurement boxes.
- The QR code assisted archive system registers and identifies assets.

Auto-diagnosis

- NaviPdM[®] automatically run diagnosis on-device based on user-selected standards such as Delta-T or absolute temperature.
- It keeps a dynamic trend graph of the asset's temperature that makes predictive maintenance easy and intuitive.



FOTRIC NaviPdM®

Robust On-device Analysis Capabilities

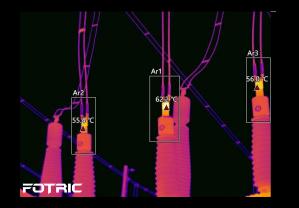
On-device Trend Analysis

Predictive maintenance made easy.



Radiometric Mastery

Record up to 14 minutes of radiometric video with every frame fully analyzable.



Temperature Rise Function

Quick and intuitive diagnosis.





Extraordinary Performance

Reveal miniscule thermal difference at any temperature range.

Up to 640*480

IR resolution

Up to **30mK** Thermal sensitivity

^{Up to} -20~1550°C

Temperature range



- Hand work eased like never before with programmable AI Quick-Access button.
- Turbo-Focus system enables swift and meticulous measurements.
- Interchangeable lenses provide coverage for any target, any scene.
- Complimentary access to Face Detection feature.

16.4

FOTRIC

15.5

Exceptional Field Work

FOTRIC's fine-tuned new series is equipped to help you thrive in the toughest environments.

"One imager to see them all"

Inspectors need to deal with objects far and near, large and small. And that's what FOTRIC products can accommodate. FOTRIC V series cameras come with *interchangeable 44°*, *25°*, *12°*, *7° lenses and OGI HR lens*, making sure the owner can accurately acquire object's condition and temperature at any distance.



44° lens



7° lens

IP54 Enclosure Rating

2-meter Drop-resistant design

- Professional laser meter for distance and area measurement.
- Full-range radiometric video for post-analysis.
- Voice annotation via Bluetooth Headset.
- QR-code scan to save in Tags, for auto-naming of files.
- Outstanding battery performance for worryfree survey sessions.





 SF_6 Gas

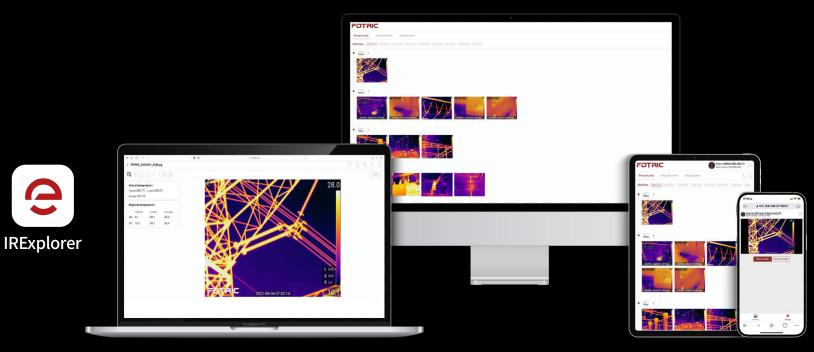
 $\mathsf{NH}_3\mathsf{Gas}$

6 | FOTRIC V series | Advanced Handheld Thermal Imager

Powerful Software-IRexplorer ™

Brings Untrammeled Communication

- Remote control via WiFi 🗢 or Self-equipped Hotspot 🔊
- Access and edit thermal files
- No need for installation





Model	V7	V5			
Thermal Imaging Parameters	ng Parameters				
Infrared Resolution	640 x 480	384 x 288			
Super Resolution	1280 x 960	768 x 576			
Thermal Sensitivity (NETD)	< 0.03°C (30mk)@30°C (86 °F)	< 0.04°C (40mk)@30°C (86 °F)			
Spectral Range	8-14µm				
Image Frame Rate	30Hz				
IR Detector Type	Uncooled infrared f	ocal plane detector			
Detector Pitch	17µm				
Field of View (FOV)	25° x 19°				
Spatial Resolution (IFOV)	0.68 mrad	1.14 mrad			
Focal Length (mm)	24.8	13.7			
Minimum Imaging Distance	0.25 m	0.1 m			
Interchangeable Lenses	Refer to lens data sheet				
Focus Mode	TurboFocus® system for continuous, laser-assisted, thermal contrast AF, touch AF; Manual focus				
Digital Zoom	1-10x, continuous				
Unique Features					
NaviPdM [®]	Support, Al insp	ection assistant			
IRExplorer ™	Support, cross-platform rem	ote control and data transfer			
T-DEF [®]	Support, thermal and visible light image blend, transparency 0% ~100%				
IREdge	Support, contour detail enhancement				
T-TWB [®]	Support, tempetrature visual representation normalization				
Temperature Analysis					
Temperature Range	-20°C ~ 120°C (-4 °F to 248 °F), 0°C ~ 700°C (32 °F to 1292 °F), 300°C ~ 1550°C (572 °F to 2822 °F)				
Intelligent Range	Support				
ROI Spot	16 spot markers				

ROI Area	12 (rectangle or circle)		
ROI Line	8 measurement lines		
Accuracy	\pm 2°C (3.6 °F) or \pm 2 %, whichever is greater, (ambient temp at 77 °F)		
Measurement Parameters	Emissivity, Partial emissivity, Reflected temperaure, Ambient temperature, Humidity, Distance and IR window compensation.		
Temperature Rise Feature	Sup	port	
ROI Emissivity	Sup	port	
Area Alarms	Support		
Color Alarms (temperature alarms)	High temperature, low temperature, and interval isotherms		
PC Software	AnalyzIR®		
Image Display			
Display Screen	5 inch touch screen (1280 x 720)		
Image Overlay	Display global max, min, avg and measurement parameters.		
High/Low Temperature Tracking	Yes, for both global and ROI		
T-TWB®	Tempetrature visual representation normalization option		
IREdge	Contour detail enhancement		
Image Mode	Thermal image, Digital Camera, Picture in Picture, and T-DEF [®] , High sensitivity mode (only active when the lens is identified as OGI HR lens)	Thermal image, Digital Camera, Picture in Picture and T-DEF®	
Palettes	16 standard palettes: Grey, Iron10, Iron, Rainbow, Grey10, GreyRed, MidGrey, Yellow, Rain, Rain10, Blue, GlowBow, Medical, Medical10, MidGreen, Prism.		
Inverted Palettes	Support (16 inverted palettes)		
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))		

Capture Feature		
Digital Camera	13MP industrial grade camera	
Storage Card	Micro SD card, 128G, expandable up to 1TB	
Capture Mode	Single frame / Video recording / Time-lapse	
Video Recording	Radiometric thermal video(IRS.) and MP4 video recording (non-radiometric).	
File Format	Radiometric thermal photo (JPEG.), thermal video (IRS.) and non-radiometric digital camera photo, MP4 video	
Gallery	Support (Image preview & analyze and video preview & analyze)	
On-device Analysis	Support (Radiometric Image and Video Data)	
Freeze Interface	Support single frame thermal image and radiometric video edition	
QR Code Functionality	Support QR code and Barcode scanning	
Annotation	Support Voice\Text\Tag\Favorite	
Voice Annotation Length	200 s	
Text Annotation	Support	
Tags	Support	
Favorite	Support (filter favorite files)	
Data Connection		
Wi-Fi Connection	2.4GHz and 5 GHz frequency, support 902.11a/b/g/n/ac	
Bluetooth Connection	BT4.2 LE, connectable to bluetooth headphone	
USB Interface	USB Type-C; USB 3.0 / 2.0 compliant,Support USB OTG	
HDMI Interface	Micro HDMI type, Comply with HDMI 1.4 specification, support 1080p image video transmission at 60Hz frame rate	
FTP Data Transfer	Accessible through WiFi or Hotspot, rapid data transfer	
Remote Display	Support Radiometric IR Video Streaming over type-C 3.0 interface; non-radiometric IR video streaming over HDMI interface and IRExplorer ™	
Remote Control	Support (through AnalyzIR [®] and IRExplorer ™)	

Battery			
Battery Type	Rechargeable Li-ion, 7.4V, 3500mAh		
Battery Operating Time	≥ 4 hours per battery		
Batter Charging Time	2.5 hours to 90% full charge		
Battery Charging System	Two-bay battery charger with LED display (12V, 3A)		
Energy Management	User-selectable screen-off modes		
Auxiliary Features			
Software Upgrade	Support on OTA upgrade and local upgrade through USB		
AI Programmable Key	Support, for quick start		
Laser	Level 2; Wavelength: 635nm; Power: <1mW; Distance measurement: 0.1~50m; Accuracy: d*0.01 $\%$ \pm 2mm"		
Laser Measurement	Distance, Length, and Area		
GPS	Support		
Compass	Support		
LED	Support		
Operation Temperature	-20°C (-4 °F) to 50°C (122 °F)		
Storage Temperature	-40°C (-40 °F) to 70°C (158 °F) (without battery)		
Relative Humidity (Operation and Storage)	<95%RH		
Ergonomic Design	Yes		
Soft Portable Bag	Support		
Hard Portable Case	Support (Hard rubber: PC + ABS, Soft rubber: TPE, Magnesium alloy, Flame retardant grade: UL94 HB)		
Dimensions (mm)	312.8 x 123.3 x 139.2		
Weight (include battery)	< 1.0kg (lens not included)		
Tripod Interface	UNC 1/4 -20 threaded hole for tripod		

Certification and Reliability			
Safety	EN 62368-1:2014+A11:2017 (Power Supply)		
Electromagnetic Compatibility	EN 61326-1:2013 (immunity) EN 61326-1:2013 Class A (emission) FCC 47 CFR Part15 Class A (emission)		
Vibration	2g (IEC 60068-2-6:1995)		
Shock	25g (IEC60068-2-27:2008)		
Collision	10g(IEC 60068-2-29) with packing		
Drop	Engineered to withstand 2 meters (6.5 feet) drop with standard lens		
Enclosure Rating	IP54 (protected against dust, limited ingress; protection against water spray from all directions), IEC60529:2013		
Warranty	2 years (standard), extended warranties are available, 10 years for the infrared detector		
Recommended Calibration Cycle	2 years (assumes normal operation and normal aging)		
Languages	English, Spanish, German, French, Traditional Chinese, Korean, Italian, Portuguese, Thai		
Standard Configuration			
Packaging	Infrared thermal imager, lens, lens cover, 3 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,quick start manual, calibration certificate, warranty card), portable soft bag, portable hard case		

Lens

Model	Lens Parameters	Standard Lens	Wide-angle Lens	Telephoto Lens	Ultra-telephoto Lens	OGI HR Lens
V7	Field of View(FOV)	25° *19°	44° *33°	12° *9°	7° *5°	25° *19°
	Spatial Resolution(IFOV)	0.68mrad	1.20mrad	0.33mrad	0.19mrad	0.68mrad
	Minimum Imaging Distance	0.25m	0.1m	1m	3m	0.25m
	Focal Length	25mm	14mm	51mm	88mm	25mm
	Temperature Range	-20~120°C, 0~700°C, 300~1550°C			-20~120°C, 0~700°C	
V5	Field of View(FOV)	25° *19°	44° *33°	12° *9°	7° *5°	
	Spatial Resolution(IFOV)	1.14mrad	2.00mrad	0.55mrad	0.32mrad	
	Minimum Imaging Distance	0.1m	0.1m	0.25m	1m	
	Focal Length	15mm	8mm	25mm	51mm	
	Temperature Range	-20~120°C, 0~700°C, 300~1550°C				

Innovation Excellence Integrity

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