FOTRIC

CONNECTING THE DIGITAL FUTURE

Advanced Handheld Thermal Imager

Upgraded

FOTRIC V Series

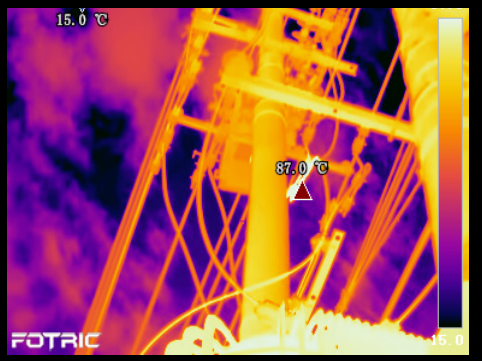
Cutting-Edge Image Algorithms

FOTRIC's imaging enhancement algorithms, such as TWB and IREdge, enable prominent image representation in complex environments.

IRedge function

The IRedge function strengthens the visual impact of object contour and edges to help users distinguish them from the background.

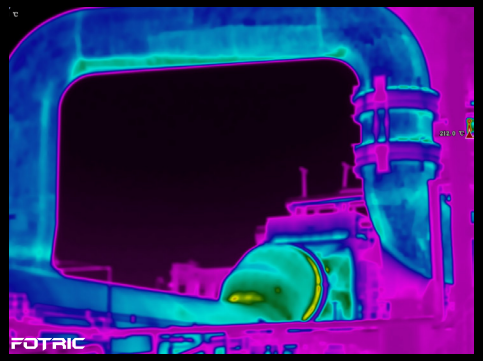
IRedge OFF



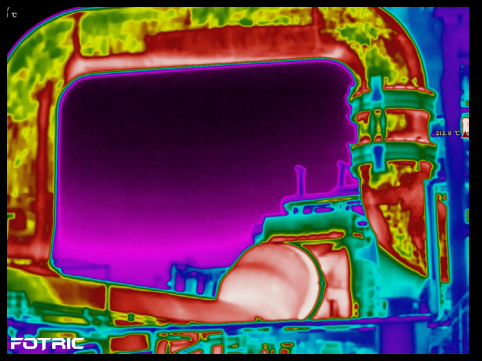
IRedge ON

TWB function

TWB essentially re-scales the palette ribbon based on the number of pixels in representing each temperature range. Consequently, the temperature distribution of the entire image is more clearly laid out for the inspector.



TWB OFF



TWB ON

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

Up to
0.19mrad
IFOV

- 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.

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° and 7° lenses***, 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.

Diversified Workflow

The V series cameras produce standardized radiometric JPEGs that's accessible through different media. They can be supported by the professional, analytical software-AnalyzIR, with customizable report templates available.

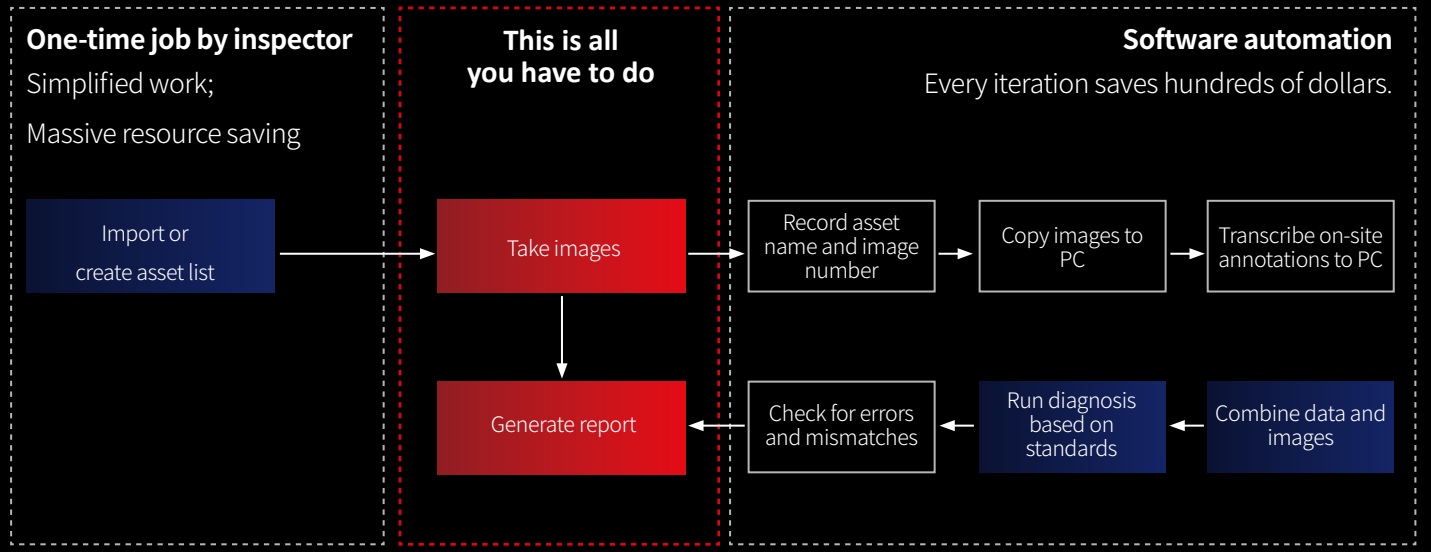
AnalyzIR®

The powerful analytical software is designed for comprehensive and professional evaluation of the thermal images. Combined with strong connectivity and multidimensional capabilities, it is a robust tool that can meet even the most stringent requirements.

Powerful software-NaviPdM®

NaviPdM

Boost Efficiency with AI-powered Automation



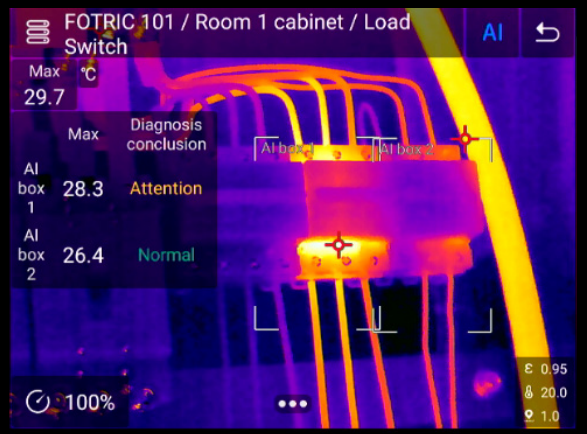
Powerful software-NaviPdM®

NaviPdM

AI assistant at your hand

Object identification & Automatic diagnosis.

Ordinary thermal camera



NaviPdM

Powerful software-IRexplorer ™

IRExplorer

Brings untrammeled communication

- Remote control via WiFi or Self-equipped Hotspot
- No need for installation
- Across any platform Windows Linux MacOS/IOS Android
- Access and edit thermal files


Bright LED Lamps to illuminate the dark
Laser ranger for accurate distance and area measurement
Built-in 13 MP digital camera for dynamic image quality
Multiple connection interfaces
Up to 128GB micro SD memory card
Tripod for 1/4" standard mounting
Interchangeable lenses
TurboFocus focus button
Ergonomic handheld design


Built-in speaker for temperature alarm
Gorilla 5" HD IPS touch screen
AI programmable key, for quick access
Batteries for totally up to 12 hours of continuous operation

Specifications

Model	V7				V5			
Thermal Imaging Parameters								
Infrared Resolution	640 x 480				384 x 288			
Super Resolution	1280 x 960				768 x 576			
Thermal Sensitivity（NETD)	30mk(0.03° C)@30° C				30mk(0.03° C)@30° C			
Spectral Range	7-14μm							
Image Frame Rate	30Hz							
IR Detector Type	Uncooled infrared focal plane detector							
Detector Pitch	17μm							
Optional Interchangeable Lenses	Wide-angle	Standard	Telephoto	Ultra Telephoto	Wide-angle	Standard	Telephoto	Ultra Telephoto
Field of View (FOV)	44° x 34°	25° x 19°	12° x 9°	7° ×5°	44° x 34°	25° x 19°	12° x 9°	7° ×5°
Spatial Resolution (IFOV)	1.20 mrad	0.68 mrad	0.33 mrad	0.19 mrad	2.0 mrad	1.14 mrad	0.55 mrad	0.32 mrad
Focal Length (mm)	13.7	24.8	51.2	87.5	8	13.7	24.8	51.2
Minimum Imaging Distance	0.1 m	0.25 m	1 m	3 m	0.1 m	0.1m	1 m	3 m
Focus Mode	TurboFocus® system for continuous, laser-assisted, thermal contrast AF; Manual focus							
Digital Zoom	1-10x, continuous							
Unique Features								
NaviPdM®	Optional							
T-DEF®	Support							
IREdge	Support							
T-TWB®	Support							
Temperature Analysis								
Complete Temperature Range	-20 ° C ~1550° C							
Temperature Range	-20 ° C ~ 120° C, 0 ° C ~ 650° C, 300-1550° C				-20 ° C ~ 120° C, 0 ° C ~ 650° C, 300-1550° C			
Intelligent Range	Support							

Specifications

ROI Spot	16 spot markers
ROI Area	8 (rectangle or circle)
ROI Line	2 measurement lines
Accuracy	± 2°C or ± 2 %, whichever is greater, (ambient temp at 25°C)
Measurement Parameters	Emissivity, Partially emissivity, Reflected temperaure, Ambient temperature, Humidity, Distance and IR window compensation.
Temperature Rise Feature	Support
ROI Emissivity	Support
Area Alarms	Support
Color Alarms (temperature alarms)	High temperature, low temperature, and interval isotherms
PC Software	AnalyzIR®, NaviPdM®
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®
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), Manual (Minimum Temp Span 2°C), Touch-screen(Minimum Temp Span 2°C)
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).

Specifications

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
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%±2mm"
Laser Measurement	Distance, Length, and Area

Specifications

GPS	Support
Compass	Support
LED	Support
Physical Parameters	
Operation Temperature	-20° C to 50° C
Storage Temperature	-40° C to 70° C (without battery)
Relative Humidity (Operation and Storage)	<95%RH
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, IEC60529:2013
Warranty	2 years (standard), extended warranties are available, 10 years for the infrared detector
Recommended Calibration Cycle	2 years
Languages	English, Korean, Spanish, Traditional Chinese, Italian, German, Portuguese
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,user manual, calibration certificate, warranty card), portable soft bag, portable hard case