

Advanced Test Equipment Corp.

www.atecorp.com 800-404-ATEC (2832)



Cutting-Edge Image Algorithms

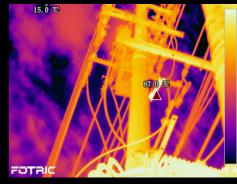
FOTRIC's imaging enhancement algorithms, such as TWB and IREdge, enable prominent image representation in complex environments.

IRedge function

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



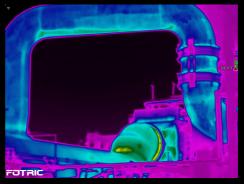
IRedge OFF



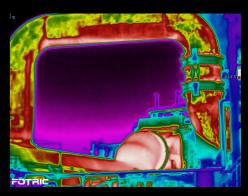
IRedge ON

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

-20~1550° C

Temperature range

Up to

30mK

Thermal sensitivity

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 340 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.





IP54

2-meter

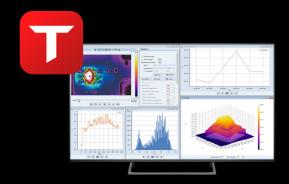
Enclosure Rating

Drop-resistant design

- Professional laser meter for distance and area measurement. (*Only for 340A series)
- 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 340 series cameras produce standardized radiometric JPEGs that's accessible through different media. They can be supported by the professional, analytical software-AnalyzIR, with a brand new report template available. In addition, users can control, edit, and stream the camera through the mobile APP, EasyIR.



AnalyzIR

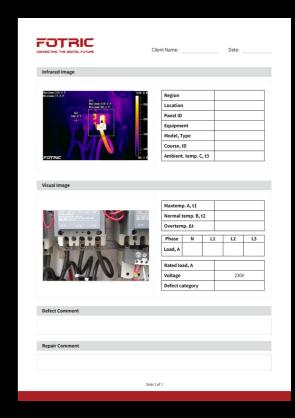
The powerful analytical software is designed for comprehensive and professional evaluation of the thermal images. Combined with strong connectivity and multidimensional capabilities, it is a robust tool that can meet even the most stringent requirements.





EasylR

The simple and elegant design of FOTRIC's newest APP aims to aid operators with automation and intuitive operation. With straightforward navigations, it enables engineers to control and view their thermal imagers remotely under the same WiFi connection.



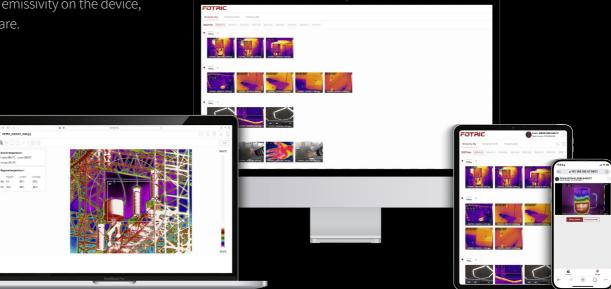
Diversified Workflow

The 340 series cameras has never been more powerful. With the latest interactive platform, IRExplorer allows users to now control and stream the thermal imager remotely through any web browsers on PC, mobile, or tablets. Users can capture, share and edit the thermal images and synchronized them to the device.



IRExplorer

The powerful interactive platform is designed for inspectors to access thermal imager's data without the trouble of downloading new softwares. By opening the web browsers on Mac, Windows, IOS, Android, and tablets, users can process and share radiometric images easily. Furthermore, now users can change temperature range and emissivity on the device, and capture images wherever they are.





Specifications

| Key Features | Fotric 348A | Fotric 347A | Fotric 346A | Fotric 345A | Fotric 345M |
|--------------------------------|---|--------------------------------|--------------------------|-------------------------|-------------------------|
| Infrared Resolution | 640*480 | 480*360 | 384*288 | 320*240 | 320*240 |
| Super Resolution (SR) | 1280*960 | 960*720 | 768*576 | 640*480 | 640*480 |
| Thermal Sensitivity (NETD) | | < 0.03°C (| @30°C , 30mk | | < 0.04°C @30°C ,40mk |
| Temperature Measurement Range | -21 | 0°C to 1550°C (-4 °F to 2822 ° | °F) | -20°C to 650°C (| -4 °F to 1203 °F) |
| High temperature expansion | / | / | / | Support | No support |
| IFOV with Standard Lens | 0.68mrad | 0.91mrad | 1.14mrad | 1.36mrad | 1.36mrad |
| Digital Zoom | | 1-10x,Continuous | adjustment of roller | | 1-8x |
| User-definable Spot Markers | 16 spot markers | 16 spot markers | 16 spot markers | 12 spot markers | 12 spot markers |
| User-defined Measurement Boxes | 12 (rectangle or circle) | 12 (rectangle or circle) | 12 (rectangle or circle) | 8 (rectangle or circle) | 8 (rectangle or circle) |
| User-defined Measurement Lines | 8 measurement lines | 8 measurement lines | 8 measurement lines | 4 measurement lines | 4 measurement lines |
| Minimum Focus Distance | 0.25m | 0.25m | 0.1m | 0.1m | 0.1m |
| Focus Mode | TurboFocus ™ Speedy Intelligent Autofocus system for continuous, laser distance, graphic contrast,manual | | | | Manual |
| Laser Measurement | Distance, Length, and Area | | | | _ |
| Common Features | | | | | |
| Field of View (FOV) | | | 25° ×19° | | |
| Al Programmable Key | Yes, for quick start | | | | |
| Navigation Satellite System | Yes, support GPS | | | | |
| Image Annotation | Favorites and AutoNaming | | | | |
| Infrared Spectral Band | 7μm~14μm | | | | |
| Detector Type | Uncooled infrared focal plane detector | | | | |
| Detector Pitch | 17μm | | | | |
| Frame Rate | 30Hz | | | | |
| Lens Options | Optional wide-angle lens, telephoto lens and ultra telephoto lens Optional wide-angle lens and telephoto lens | | | | ens and telephoto lens |
| Lens Recognition | Yes | | | | |
| Storage Memory | Standard issue 128GB micro SD memory card, expandable up to 2TB | | | | |

| Batteries | 3 Lithium-ion rechargeable batteries (7.4V, 3500mAh) | 2 Lithium-ion | | |
|---|--|---------------|--|--|
| Ergonomic Design | Yes | | | |
| Standard Configuration | Infrared thermal imager, lens, lens cover, 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, certificate of QC, certificate of inspection, warranty card, USB disk), portable soft bag, portable hard case | | | |
| Temp Analysis | | | | |
| Accuracy | \pm 2°C or \pm 2 %, whichever is greater (ambient temp between15°C ~35°C) | | | |
| On-Screen Temperature Test | Temp Rise Test, Temp Differentiation Test | | | |
| Temperature Measurement | Center-point and center-box | | | |
| Highest/Lowest Temp Spot Mark | Yes,full-screen and measurement boxes both with highest/lowest temp spot marker | | | |
| On-screen Analysis | Emissivity, Partially emissivity, Reflected temperaure, Ambient temperature, Humidity, Distance and IR window compensation. | | | |
| Sound Alarms | Area alarm; High temperature alarm and low temperature alarm | | | |
| Color Alarms (temperature alarms) | High temperature, low temperature, and interval isotherms | | | |
| Image Display | | | | |
| Display | Gorilla Glass Explosion-proof IPS LCD; Display pixels: 1280*720; Display size: 5inch (landsca | pe) | | |
| Build-in Digital Camera (visible light) | 13-megapixel, industrial digital camera | | | |
| LED Light (torch and flash lamp) | Yes | | | |
| Picture-in-Picture | Yes,resizable and movable | | | |
| Palettes | 16 standard palettes; 16 inverted palettes | | | |
| Temp Scale | Touch-screen, auto, manual | | | |
| Minimum Temp Span (Manual) | 2°C (3.6 °F) | | | |
| Data Storage | | | | |
| Analyze Radiometric Image Data | Yes | | | |
| Analyze Radiometric Video Data | Yes | | | |
| Image File Formats | Standard JPEG with measurement data included | | | |
| Video File Formats | Full radiometric video in IRS format;standard MPEG4 non-radiometric video; | | | |
| Gallery | Image preview and analyze, video preview and analyze | | | |
| Software | FOTRIC AnalyzIR, EasyIR,FOTRIC NaviTiR | | | |
| Voice Annotation | 200 seconds built-in microphone and speaker on still image and video | | | |
| Text Annotation | Yes | | | |
| Remote Control Operations | Remote display and control operation through Fotric AnalyzIR software and EasyIR mobile | APP | | |

| Auto Capture | Yes, 1Hz to 12Hz frame rate adjustable; 2s to 60m59s interval adjustable | | | | |
|-------------------------------|--|--|--|--|--|
| Battery | | | | | |
| Battery Life | Over 4 hours per battery | | | | |
| Battery Charging Time | 2.5 hours to 90% full charge | | | | |
| Battery Charging System | Two-bay battery charger with LED display (12V, 3A) | | | | |
| AC Operation | AC operation with included power supply (100V ac -240V ac, 50/60Hz) | | | | |
| Power Saving | User-selectable screen-off modes | | | | |
| General Specifications | | | | | |
| WiFi Connection | Support 2.4GHz and 5 GHz frequency, support 902.11a/b/g/n/ac | | | | |
| Bluetooth Connection | BT4.2 LE, connectable to bluetooth headphone | | | | |
| FTP Data Transfer | Accessible through WiFi or Hotspot, rapid data transfer | | | | |
| Device Interface | Support USB Type-C 3.0, Micro HDMI and SD card | | | | |
| USB Interface | USB type-C type; conforms to USB 3.0 / 2.0 specification | | | | |
| HDMI Interface | Micro HDMI type,Comply with HDMI 1.4 specification, support 1080p image video transmission at 60Hz frame rate | | | | |
| SD Card Interface | Support SD 3.0 | | | | |
| Laser Ranger/Pointer | Independent key activation; Laser level: 2; Wavelength: 635nm; Power: <1mW; Laser distance: 0.1~50m, Accuracy: $d^*0.01\% \pm 2mm$ | Independent key activation; Not support distance measurement | | | |
| Operating Temperature | -20°C to +50°C (-4 °F to 122 °F) | | | | |
| Storage Temperature | -40°C to +70°C (-40 °F ~158 °F) | | | | |
| Relative Humidity | < 95%RH | | | | |
| Safety | EN 62368-1:2014+A11:2017 (Power Supply) | | | | |
| Vibration | 2g (GB/T 2423.10-2008/IEC 60068-2-6:1995) | | | | |
| Shock | 25g(GB/T 2423.5-2019/IEC60068-2-27:2008) | | | | |
| Electromagnetic Compatibility | EN 61326-1:2013 (immunity); EN 61326-1:2013 Class A (emission) FCC 47 CFR Part15 Class A (emission) | | | | |
| Drop | Engineered to withstand 2 meters (6.5 feet) drop with standard lens | | | | |
| Enclosure Rating | IP54, GB/T 4208-2017/IEC60529:2013 | | | | |
| Size (H x W x L) | 312.8mm×123.3mm×139.2mm | | | | |
| Tripod | UNC 1/4"-20 interface | | | | |
| Weight (battery included) | < 1.0kg (lens not included) | | | | |

| Hard Case | Hard rubber: PC + ABS, Soft rubber: TPE, Magnesium alloy, Flame retardant grade: UL94 HB | | |
|-------------------------------|--|--|--|
| Warranty | 2 years (standard), extended warranties are available,10 years for core detector | | |
| Recommended Calibration Cycle | 2 years (assumes normal operation and normal aging) | | |
| Supported Languages | English,Korean,Spanish,German, Italian, Portuguese | | |

| Optional Lens | Fotric 348A | Fotric 347A | Fotric 346A | Fotric 345A | Fotric 345M |
|-----------------|--|---------------------------------------|---|--|--|
| Wide-angle | 44° ×34° (< 0.1m), IFOV: 1.20 mrad | 44° ×34° (< 0.1m), IFOV: 1.6 mrad | 44° ×34° (< 0.1m), IFOV: 2.0 mrad | 44° ×34° (< 0.1m), IFOV: 2.40 mrad | 44° ×34° (< 0.1m), IFOV: 2.40 mrad |
| Telephoto | 12° ×9° (< 1.0m), IFOV: 0.33 mrad | 12° ×9° (< 1.0m), IFOV: 0.44 mrad | $12^{\circ} \times 9^{\circ}$ (< 1.0 m), IFOV: 0.55 mrad | 12° ×9° (< 1.0m), IFOV: 0.65 mrad | 12° ×9° (< 1.0m), IFOV: 0.65 mrad |
| Ultra Telephoto | 7° ×5° (< 3.0m), IFOV: 0.19 mrad | 7° ×5° (< 3.0m), IFOV: 0.25 mrad | 7° ×5° (< 3.0m), IFOV: 0.32 mrad | - | - |

Innovation Excellence Integrity

Equipment described herein may require EU, US and UNSC authorization for export purposes.

Imagery for illustration purposes only.

Specifications are subject to change without notice.

FOTRIC INC. All Rights reserved.

Update 2023/10/18

info@fotric.com www.fotric.com

