FOTRIC 320F Series

## Compact handheld thermal imaging cameras

Ready-to-Go
All-Purpose
Inspection Tool

All-Purpose | Price-wise | Reliable

Ready-To-Go
All-purpose, All-budgets

- Detect Mechanical, Electrical and Building hidden thermal abnormalities with enhanced images.

- Measure temperatures from -20 to 550°C with automatic range adjustment.

- Reveal low visibility details with LED flash lamp and Laser pointer.

- Aim and shoot large scenes with wide-angle lens.
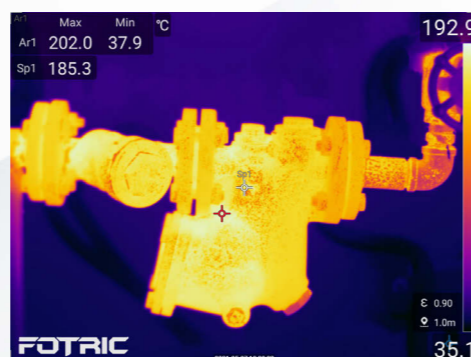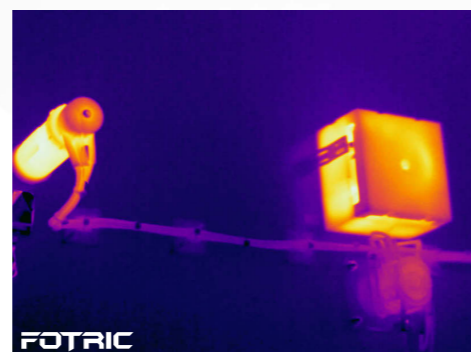
Easy
Inspections

- Always in Focus

  Focus-free thermal and digital camera, suitable working distance as close as 0.5m.

- Easy Operation

  Highly-responsive 3.5" touch-screen and fast user interface for a smoother experience.

- Compact and light

  Its weight and size fit as one more tool in the box or overall pocket.
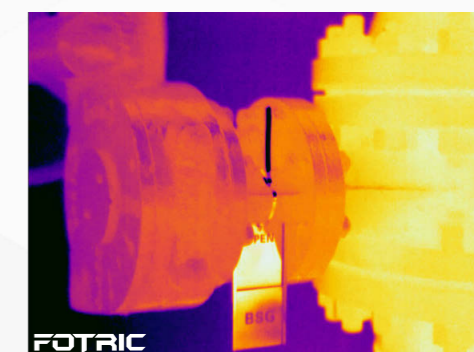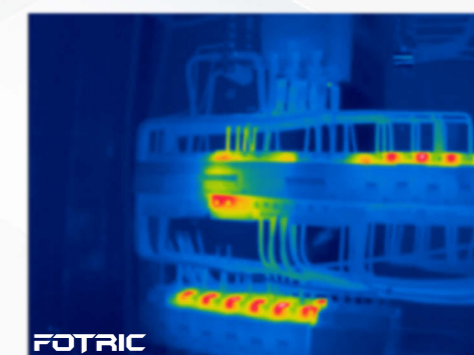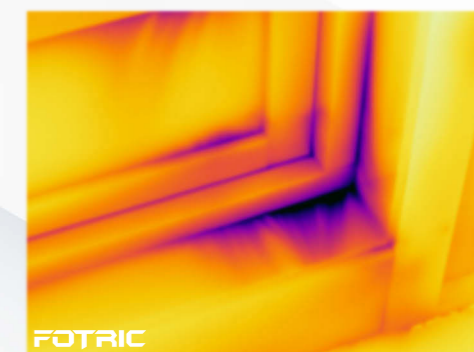
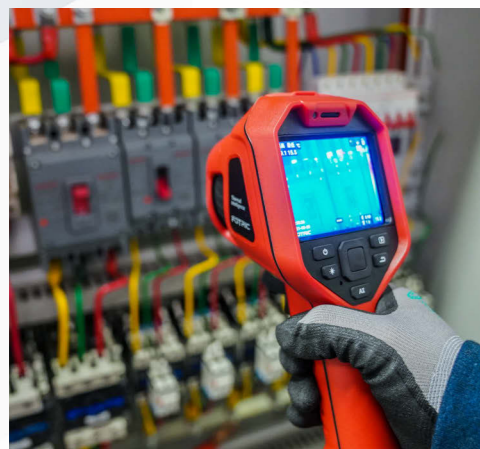# Convenient and Compatible

- Hands-free annotations

  - Record voice-notes and listen to alarms via a Bluetooth headset.
  - Tag images with equipment name using QR-Code scanner.

- Easy Sharing

  - Transfer images in seconds via Wi-Fi or Memory Card (64GB).
  - View thermal photos and videos in almost any device (JPEG & MPEG4 formats).
  - One-click automatic reports via FOTRIC AnalyzIR software.

Reliable from The Inside-out

- Dust and water resistant (IP54), 2 meters drop designed. Highly durable against common field environments.

- Lifetime Free camera software up-grades to meet global users's needs.

  LIMITED LIFETIME Free Upgrades
  IP54

- FOTRIC is committed to deliver state-of-art products with world-class components and unique software.
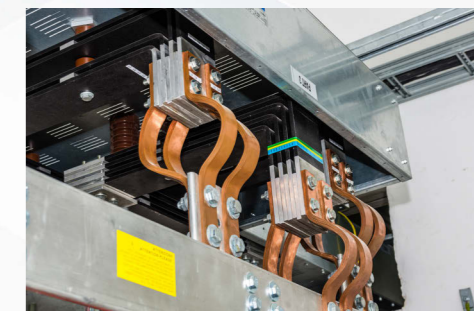
Specifications

Core parameters	FOTRIC 325F	FOTRIC 323F	FOTRIC 322F	FOTRIC 321F
Thermal Resolution	320*240	264*198	160*120	128*96
Super Resolution(SR)	640*480	528*396	320*240	256*192
Thermal Sensitivity (NETD)	40mk(0.04°C)	40mk(0.04°C)	60mk(0.06°C)	60mk(0.06°C)
Lens Options(Not interchangeable)	49°x 36.8°	49°x 36.8°	46.5°x 35°	46.5°x 35°
IFOV (spatial resolution)	2.78 mrad	3.40 mrad	5.15 mrad	6.44 mrad
Focal length	f 7.5	f 7.5	f 3.3	f 3.3
Minimum Focus Distance	0.5m	0.5m	0.5m	0.5m
Focus Mode	0.5 meters focus free			
Frame Rate	30Hz			
AI programmable key	Support			
Wi-Fi & Bluetooth	Support			
Wi-Fi FTP Transfer	Transfer imaging data to computer, by Wi-Fi FTP protocol			
Geographic Location	Support, GPS			
Thermal and visible light Image fusion	Support, transparency 0% ~100%			
Picture in Picture	Support, resizable and adjustable			
TWB Non-linear thermal color display	Support			
Build-in digital camera	8 MP industrial camera			
LED flash lamp	Support			

Temperature Analysis				
Temperature Range	-20 °C ~ 120°C, 0 °C ~ 550°C			
Intelligent Range Auto-fit	Support			
Measurement Tools	Spot:6; Line:1; Rectangle/Circle:4		Spot:4; Line:1; Rectangle/Circle:4	
Measurement Accuracy	±2 °C or 2% , whichever is greater (at 25 °C ambient temperature)			
Emissivity	Support			
Ambient Temp	Support			
Reflected Temp	N/A			
Relative Humidity	Support			
Measurement Distance	Support			
IR Window Compensation	N/A			
Temperature Rise & Difference	N/A			
ROI Sound Alarm	Support, via Speaker or Bluetooth headset			
ROI Partial Emissivity	N/A			

Image Display				
Display Screen	3.5 inch Touch Screen			
Image Mode	Thermal, Visible light, Picture in Picture & Image Fusion			
Palettes	8, Grey, Iron, Rainbow, Grey-red, Rain, GlowBow, Medical, Prism			
Inverted Palettes	N/A			
Isotherm/Color Alarms	Support, (Above, Below, and in-between)			
Auto Scale	Support			
Manual Scale	Support			
Touch Scale	Support			
Minimum Temperature Span	Auto:3°C , Manual:2°C			

Storage & Analysis	FOTRIC 325F	FOTRIC 323F	FOTRIC 322F	FOTRIC 321F
Storage Card	TF card, 64GB			
Capture Mode	Single frame capture and Time-lapse			
Video Recording	Radiometric thermal video(IRS.) and MP4 video recording			
File Format	Radiometric thermal photo(JPEG.), visible light photo, Radiometric video(IRS.) and MP4 video			
On screen Analysis	Support			
Voice Annotation	Support, record up to 120 seconds; via Mic or Bluetooth headset			
Text Annotation	Support			
Tags	Support, Manual input and QR-code scan			
Favorite	Support			
PC analysis and Report Software	Fotric AnalyzIR software, FREE			
Remote Display&Analysis	Support			

Power System				
Battery	3.6V, 5000mAh Li-battery			
Battery operation time	≥4 hours		≥5 hours	
Battery charging time	3.5 hours to full-charge by battery dock. 3 hours to full-charge by connectting to camera.			
Charging methods	Support battery dock adaptor or Type-C interface on camera.			
Power supply	Support Type-C interface charging method, from power adaptor or computer.			
Auto screen-off	Support			

General Specifications				
Spectral range	7-14µm			
IR Detector type	uncooled FPA infrared detector			
Detector Pitch	17µm			
Digital Zoom	1-8 times, continuous			
Wi-Fi Connection	Support 2.4GHz&5GH channel, Support 802.11a/b/g/n/ac			
Bluetooth Connection	BT4.2 LE, Support connect to Bluetooth headset			
USB Interface	USB Type-C type；USB 3.0 / 2.0 compliant，Support USB OTG			
HDMI Interface	Micro HDMI type, HDMI 1.4 compliant, Support 1080P imaging video streaming in 60Hz.			
Storage Card Interface	TF Card, Support Hot-plug.			
Laser pointer	Level2；wavelength：635nm；Power：<1mW			
Operation temperature	-20°C to 50°C			
Storage temperature	-40°C to 70°C, without battery			
Humidity	<95%RH			
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	243mm*95mm*142mm			
Weight (include battery)	730g			
Enclosure rating	IP54			
Tripod interface	UNC 1/4 -20 threaded hole for tripod			
Warranty	2 years warranty on camera, 10 years for IR detector.			
Recommended calibration cycle	2 years			
Supported languages	English, Spanish, Korean, Traditional Chinese			
RoHS compliant	Yes			
Box Contents	FOTRIC 320 handheld thermal camera, Documentations(certificate of inspection, certificate of calibration, warranty card, packing list), Quick-start user manual, USB-Type C cable, Micro-HDMI cable, TF card ,TF card reader, Power adaptor, Battery charger dock, 2 pieces of batteries.			

Innovation
Excellence
Integrity

Contact FOTRIC

FOTRIC
— Thermal Intelligence —