

Product Datasheet - Technical Specifications



More information in our Web-Shop at ► www.meilhaus.com

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FOTRIC 320M Series

Semi-Professional Compact Thermal Imagers

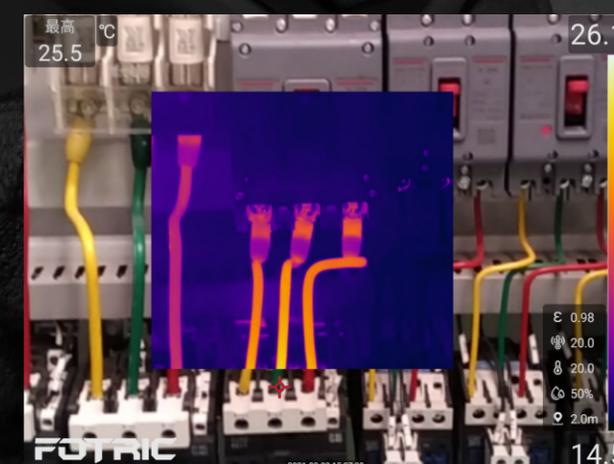
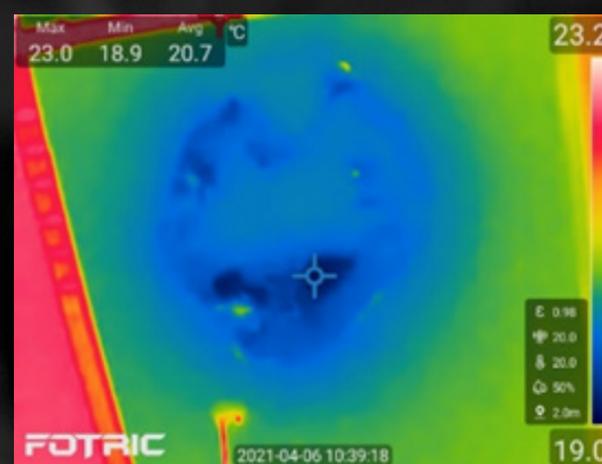
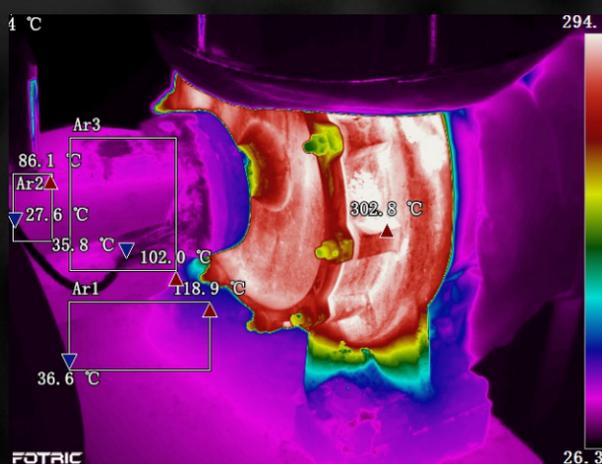


Next-Level in
Professional
IR imaging

Flexible | Intuitive | Reliable

Decades of Thermography Expertise in your hands

- Perform inspections in more industries with its extended, -20 to 650°C intelligent range.
- More alternatives on working distances
 - Work in confined spaces or fit larger targets with 49° & 46° wide-angle lenses.
 - Asses electrical targets with 25° lens.
- Powered with TWB image-balancing technologies for more intuitive inspections.
- Get deeper insights of complex analyses with up to 20 ROIs on screen.



More Intuitive Inspections



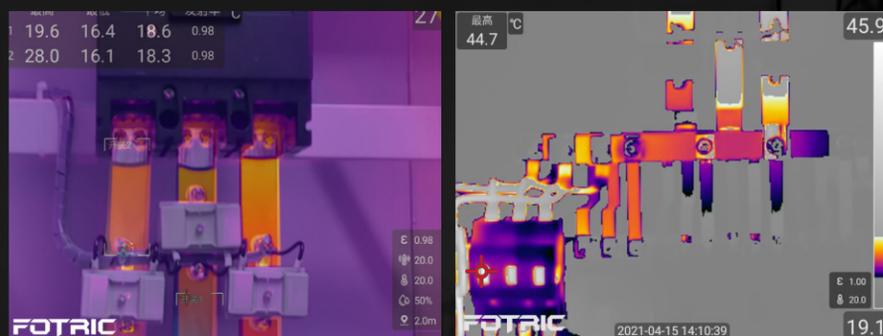
- Total focus control:
 - Achieve sharper details by easily switching from focus-free to manual focus.
 - Get as close as needed with its outstanding 0,1 m minimum focus distance*.
- Enriched inspection results:
 - Record and listen to valuable voice annotations using a Bluetooth headset.
 - Add important written notes to videos and pictures.
- Enhanced operability:
 - Responsive 3.5" LCD touch screen & fast user interface for a smooth professional experience.
 - Light-weight, compact design that fits in any toolbox or over-all pocket.



* Available for 49° lens models.

Technology-Assisted Inspections

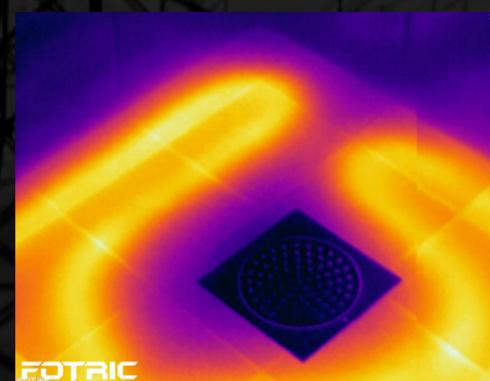
- Spot problems faster with MagicThermal™, one-touch intelligent feature that reveals commonly hidden details.



- Tag images of the same equipment by scanning QR-Codes to use Auto-Naming feature.

- High-Quality Reporting:

- Transfer images in seconds via Wi-Fi or High-Speed SD Card.
- One-click automatic reports with FOTRIC AnalyzIR software.
- Easy-sharing JPEG thermal pictures with embedded temperature values.
- On-device radiometric video recording.



Reliable from The Inside-out

- Top-class images by combining world-leading highly sensitive sensors (40 mK*) with FOTRIC's unique image-enhancing algorithms.

- Up to 10* hours of combined battery life makes it the perfect companion for long shifts.



- Lifetime Free upgrades of camera software based on global users' insights.



* Available for 264x198 pixels and above models.

- IP54 enclosure rating, 2 meters-drop tested. Highly durable against common field environment.

IP54

2m



Specifications

Core parameters	FOTRIC 326M	FOTRIC 325M	FOTRIC 323M	FOTRIC 322M
Thermal Resolution	384*288	320*240	264*198	160*120
Super Resolution(SR)	768*576	640*480	528*396	320*240
Thermal Sensitivity (NETD)	40mk(0.04°C)	40mk(0.04°C)	40mk(0.04°C)	60mk(0.06°C)
Lens Options(Not interchangeable)	49°x 36.8° 25°x 19°	49°x 36.8° 25°x 19°	49°x 36.8° 25°x 19°	49°x 36.8° 25°x 19°
I FOV (spatial resolution)	2.27 mrad 1.14 mrad	2.78 mrad 1.37 mrad	3.40 mrad 1.66 mrad	5.15 mrad 2.73 mrad
Focal length	f 7.5 f 15	f 7.5 f 15	f 7.5 f 15	f 3.3 f 7.5
Minimum Focus Distance	0.1m 0.15m	0.1m 0.15m	0.1m 0.15m	0.1m 0.1m
Focus Mode	Manual focus & 0.5 meters focus free (available for 49° lens)			
MagicThermal™	Support			
AI programmable key	Support			
Wi-Fi & Bluetooth	Yes, for data transfer & Headset.			
FTP Wi-Fi Transfer	Connect to computer by Wi-Fi/hot-spot, transfer data by FTP			
Geographic Location	Support, GPS/Beidou			
T-DEF™	Support, thermal and visible light image fusion, transparency 0% ~100%			
Picture in Picture	Support			
TWB™	Support, Non-linear thermal color display			
Build-in digital camera	8 MP industrial camera			
LED flash lamp	Support			
Frame Rate	30Hz			
Temperature Analysis				
Temperature Range	-20 °C ~ 120°C, 0 °C ~ 650°C			-20°C~120°C,0°C~550°C
Intelligent Range Auto-fit	Support			Support
Measurement Tools	Spot:10; Line:2; Rectangle/Circle:8			Spot:10; Line:2; Rectangle/Circle:8
Measurement Accuracy	±2 °C or 2% , whichever is greater (at 25 °C ambient temperature)			
Emissivity	Support			
Ambient Temp	Support			
Reflected Temp	Support			
Relative Humidity	Support			
Measurement Distance	Support			
IR Window Compensation	Support			
Temperature Rise	Support			
ROI Alarm	Support			
ROI Emissivity	Support			
Image Display				
Display Screen	3.5 inch Touch Screen			
Image Mode	Thermal image, Visible light, Picture in Picture & T-DEF™			
Palettes	8, Grey, Iron, Rainbow, Grey-red, Rain, GlowBow, Medical, Prism			
Inverted Palettes	Support			
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 326M	FOTRIC 325M	FOTRIC 323M	FOTRIC 322M
Storage Card	TF card, 64GB			
Capture Mode	Single frame capture and Time-lapse			
Video Recording	Full-radiation thermal video(IRS.) and MP4 video recording. Up to 14 minutes.			
File Format	Full radiation thermal photo(JPEG.), visible light photo, thermal video(IRS.) and MP4 video			
On screen Analysis	Support			
Voice Annotation	Support			
Text Annotation	Support			
Tags	Support, Manual input and QR-code scan			
Favorite	Support			
PC analysis and Report Software	Fotric AnalyzIR software, FREE			
Remote Display&Control	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 connecting 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	thermal camera, portable soft bag, portable hard case, 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, 2 pieces of batteries.			