FOTRIC *H* series

Acoustic Imaging Cameras





Extraordinary Sensitivity & Detectability

- 162 MEMS Digital Microphones
- 6.6-inch Spiral Array Layout

Embrace Efficient Inspection in High-definition

- Acoustic Image Field of View (FOV): 66°×52°
- Industrial Digital Camera: 13 Megapixels

Capture Fleeting Signals

- Acoustic Signal Linger Mode (T-FFTD®)

Versatile Features for Different Applications

- Leakage Cost Evaluation
- Partial Discharge Diagnosis

Unveil Details with Unprecedented Clarity

- Gray Scale Background, Magnifying Signal Contrast

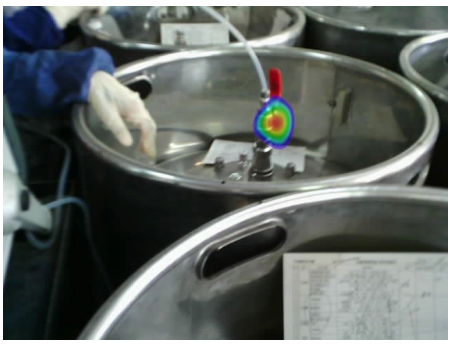
One-click Access to Vital Data

- Favorite and Filter Feature

Gas Leakage Applications

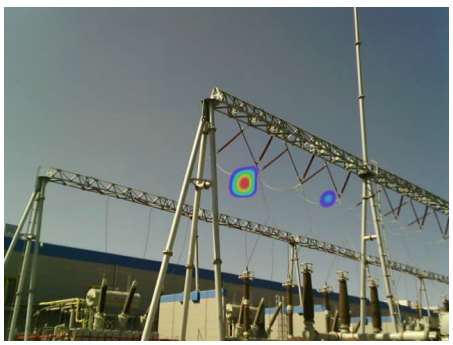


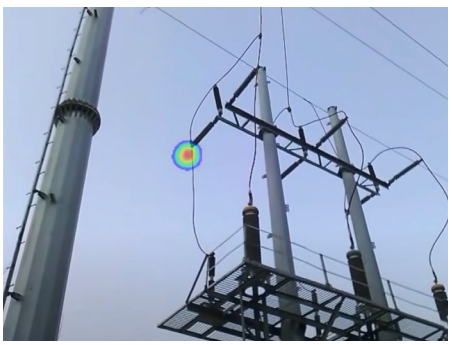


Partial Discharge Applications





Specifications

Model	H6	H4
Acoustic Imaging Parameters		
Microphone Channels	162 MEMS digital microphone	112 MEMS digital microphone
Acoustic Image FOV	66° × 52°	
Acoustic Sampling Rate	200kHz	
Acoustic Refresh Rate	25Hz	
Working Distance	0.3~200m(1~626ft)	
Acoustic Measurement Analysis		
Frequency Range	2~100kHz	
Sound Pressure Measurement Range	10kHz：6~120dB SPL 15kHz：-10~120dB SPL 20kHz：-7~120dB SPL 25kHz：-25~120dB SPL 30kHz：-5~120dB SPL 35kHz：7~120dB SPL 40kHz：2~120dB SPL 45kHz：-2~120dB SPL 50kHz：-9~120dB SPL 55kHz：-2~120dB SPL 60kHz：3~120dB SPL 65k Hz：1~120dB SPL 70kHz：8~120dB SPL 75kHz：7~120dB SPL	10kHz：6~120dB SPL 15kHz：-10~120dB SPL 20kHz：-7~120dB SPL 25kHz：-19~120dB SPL 30kHz：-3~120dB SPL 35kHz：7~120dB SPL 40kHz：5~120dB SPL 45kHz：-2~120dB SPL 50kHz：-9~120dB SPL 55kHz：-2~120dB SPL 60kHz：3~120dB SPL 65kHz：1~120dB SPL 70kHz：8~120dB SPL 75kHz：7~120dB SPL
Frequency Range Selection	Support preset frequency range for different scenarios for later selection; Support manual adjustment for frequency range.	
Measurement Spot	2	
Measurement Area	2	
Detection Mode	LQ Mode: Displays the leakage level; PD Mode: Displays a PRPD diagram, adapted to different AC frequencies (50/60Hz).	
Default AC Frequency	60Hz	
Acoustic Image Focus	Masks the surrounding area and focuses only on a selected part of the acoustic image.	
On-device Analysis	The device can directly analyse acoustic images	
Analysis Software	AnalyzIR professional thermal and acoustic image analysis software.	
Leak Evaluation	Automatic identification of leakage points, automatic evaluation of leakage and annual energy costs.	
Partial Discharge Diagnostics	Automatic diagnosis of discharge types such as surface, floating and tip (corona) discharges.	
Acoustic Imaging Display		
Display Screen	5", 1280*720 pixels, LCD touchscreen display with Gorilla Anti-Explosion screen.	
Image Mode	Single, Multi, Hologram	
Single Source Mode	Overlay the acoustic image of the strongest sound pressure area on the digital camera image.	
Multi Source Mode	Overlay the acoustic image of multiple strong sound pressure area on the digital camera image.	

Specifications

Hologram Mode	Adjust the sound pressure threshold to overlay the acoustic image of the area above the threshold on the digital camera image.
Palette	Support 3 palettes: Red-Blue, Iron, Grey. Supports transparency adjustment.
Gray-scale Background	Displayed as a digital image in black and white grey scale
Information Overlay	Displays results of leak evaluation; Displays diagnostic results for type of partial discharge; Displays measurement results and time stamp.
Sound Pressure Tracking	Special marker tracking the maximum sound pressure spot.
T-FFTD®	Capture instantaneous sound signals and make it stay longer in real-time acoustic display.
Digital Zoom	1~10x, continuous
Capture Features	
Digital Camera	13 megapixel, industrial-grade digital camera.
Storage Card	SD card, hot-swappable, supports up to 1TB
Single Frame Capture	Support
Image Format	JPEG (holographic acoustic image)
Video Format	MP4
QR Code	QR codes and bar codes can be scanned as tag and text annotations
Voice Annotation	Record up to 120 seconds of voice to be saved in acoustic image
Text Annotation	Enter text via soft keyboard to save to acoustic images and holographic video.
Tags	Enter text via the soft keyboard to save to acoustic images, which can then be filtered by tags in the gallery.
Favorite	Click on the 'Favorite' button to save the Favorite status to Acoustic images and Holographic video and highlight it in the gallery preview screen, then filter by 'Favorite' status in the gallery.
Non-Hologram Video Recording	Supports non-holographic acoustic video recording (for viewing only, not for analysis).
Gallery	Supports viewing, editing, and deleting already recorded images and video files.
Data Connection	
WiFi	Support 2.4GHz&5GH channel, Support 802.11a/b/g/n/ac
Bluetooth	Support
USB	USB Type-C type；USB 3.0 / 2.0 compliant, Support USB OTG.
HDMI	Micro HDMI type, HDMI 1.4 compliant, Support 1080P imaging video streaming in 60Hz.
FTP Data Transfer	Connect to the device via WiFi network or the device's own WiFi hotspot, and then access the data in the device via FTP.
Remote Access	Via HDMI HD port to connect to a display or projector.
Auxiliary Features	
Real-time Distance Measurement	Real-time calculation of the distance to the sound source from the incoming sound signal of the acoustic sensor.
Headphones	Real-time monitoring of incoming sound signals from acoustic sensors via Bluetooth headset.

Specifications

GPS	Support BeiDou/GPS/GLONASS satellite positioning, location information can be saved to acoustic image
Compass	Supports 360° orientation and orientation information can be saved to acoustic images
LED Flash Lamp	Supports torch illumination and flash light mode
Power System	
Battery	7.4V, 3500m rechargeable lithium battery, field replaceable.
Battery Operation Time	Continuous work ⩾ 4h （depends on the environment and work load）
Charging Method	Support charging dock, and USB direct charging.
Battery Charging Time	Charge to 90% in 2.5 hours.
Energy Management	Automatically screen rest time.
External Power Source	Support using DC 12V to power the device.
Reliability and Certificates	
Safety	SELV(IEC60950-1:2005)
EMC Compatibility	IEC 61000-4-2
Enclosure Rating	IP54(IEC 60529)
Shock	25g(IEC 60068-2-27:2008)
Vibration	2g(IEC 60068-2-6:1995)
RoHS Compliant	Compliant
Physical Parameters	
Operating Temperature	-4~112 °F
Storage Temperature	-40~158 °F without battery
Relative Humidity	<95%RH
Dimension (mm)	175mm*151mm*95mm
Weight (include battery)	2.86lb
Battery Weight	0.44lb
Warranty	
Warranty	2 years
Recommended Calibration Interval	1 years
Language	
Languages	English, Spanish, German
Configurations	
Packaging	FOTRIC acoustic imaging camera, 2 pieces of rechargeable lithium battery,Charging dock, USB to USB-C cable, Micro HDIM to HDMI cable, Documents(certificate of quality, certificate of calibration, warranty card, packing list), Quick start manual,128G SD card, SD card reader, Power adaptor, Softbag, Hard carrying case.

FOTRIC

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