Fotric H4Mini Datasheet

■ Specifications

Basic parameters	
Microphone channels	112 MEMS digital microphones
Acoustic image field of view (FOV)	66° * 52°
Sound pressure sensitivity	0.01□/min@0.1MPa,1.3m,φ30μm orifice 0.025□/min@0.3MPa,6.5m,φ30μm orifice 0.045□/min@0.3MPa,7.5m,φ40μm orifice
Measured sound pressure range	10kHz:6~120dB SPL 15kHz:-3~120dB SPL 20kHz:-7~120dB SPL 25kHz:-13~120dB SPL 30kHz:-2~120dB SPL 35kHz:8~120dB SPL 40kHz:5~120dB SPL 45kHz:-2~120dB SPL 50kHz:-5~120dB SPL 55kHz:-2~120dB SPL 60kHz:3~120dB SPL 65kHz:2~120dB SPL 70kHz:8~120dB SPL 75kHz:7~120dB SPL
Sound sampling rate	200kHz
Acoustic refresh rate	25Hz
Working distance	0.3–100m
Measurement and analysis	
Positioning frequency range	2–100kHz
Frequency range selection	Support pre-configured frequency ranges for different scenarios, and selection of appropriate frequency range afterward Support manual adjustment of frequency bands
Measurement Spot	2
Measurement Area	2
Detection mode	Leakage mode: Displays the leakage level on the device
Acoustic focusing	Shield surrounding areas, focus only on the area of interest for the acoustic image
On-device Analysis	The device is capable of directly analyzing acoustic images and holographic acoustic videos
Analysis software	AnalyzIR professional acoustic image analysis software
Leak evaluation	Automatically identify leak points and evaluate leakage volume and annual energy cost
Partial discharge diagnosis	Not supported.
Image display	
Display screen	3.5-inch, 640*480 pixels, IPS LCD touchscreen with Gorilla explosion-proof cover glass
Image mode	Single sound source, multiple sound sources, holographic modes
Single sound source	Overlay the acoustic image of the strongest sound pressure region on the visible light image
Multiple sound sources	Overlay the acoustic images of multiple strong sound pressure regions on the visible light image

Holography	Adjust the sound pressure threshold and overlay the acoustic image of areas above the threshold on the visible light image
Palette	Support 3 color palettes: Red-Blue, Iron, Grey Supports transparency adjustment
Black-and-white background	Visible light image displayed in black-and-white grayscale
Image overlay information	Display leak level and assessment results, measurement parameters (sound source type, target distance) information, and date and time information
Sound pressure tracking	Automatically track the maximum sound pressure with special marking
Acoustic image delay (T-FFTD®)	Capture instantaneous sound signals and allow them to remain longer in the real-time acoustic image
Digital zoom	1–6x continuous zoom
Imaging function	
Digital camera	13-megapixel industrial-grade digital camera
Storage card	SD card, hot-swappable, supports up to 1TB
Single-frame capture	In single sound source, multiple sound source, and holographic modes, save as an analyzable acoustic image
Holographic Acoustic Image Video Recording	Supports recording of holographic acoustic videos for analysis
MP4 Video Recording	Support for MP4 video recording in all acoustic image source modes
Image format	jpg (acoustic image)
Video Format	acs (holographic video), MP4
Freeze Interface	In single source mode, multi-source mode, and holographic modes, single-frame capture supports enabling a freeze frame for preview.
QR Code Functionality	Supports scanning QR codes and barcodes as text annotations and tags.
Voice Annotation	Records voice for up to 120 seconds, saved in acoustic images and holographic acoustic videos
Text Annotation	Input text via soft keyboard, save to acoustic images and holographic acoustic videos
Tag Table	For each row in the Tag Table, input text via drop-down list or soft keyboard, save to acoustic images and holographic acoustic videos; later, filter by tag content in the gallery
Favorites	Click the favorite button to save the favorite status to acoustic images and holographic acoustic videos, highlighted in the gallery preview screen, and later filter by favorite status in the gallery.
On-device gallery	Supports viewing images, videos, and reports in the gallery by icon. Supports preview of images, videos, and reports in the gallery. Supports analysis of acoustic images and holographic acoustic videos in the gallery. Supports filtering and deleting images, videos, and reports in the gallery.
On-device Report	Supports generating Word or PDF reports
Data connectivity	
USB interface	USB Type-C, compliant with USB 3.0/2.0 standard

HDMI Interface	Micro HDMI type, compliant with HDMI 1.4 specifications, supports transmission of 1080P images/videos at 60Hz
Remote Display	Connect to a display or projector via HDMI high-definition interface
Auxiliary functions	
Software and firmware upgrades	Support local upgrade via SD card
LED illumination lamp	Support flashlight illumination and flash mode
Power system	
Battery type	3.6V, 5000mAh Rechargeable Lithium Battery, Field-Replaceable
Battery operating time	Continuous Operating Time ≥ 4 Hours (Actual runtime depends on environment and usage conditions)
Charging method	Supports charging via dock charger and direct charging via USB Type-C interface
Charging time	Charge up to 90% in 2.5 hours
Energy management	Auto shutdown, manual screen off
External power supply	Supports power supply to the device via USB Type-C interface
Reliability and certification	
Safety standards	GB 4793.1/EN 61010-1
Electromagnetic compatibility	GB/T 18268.1/EN IEC 61326-1
Protection rating	IP54(GB/T 4208/IEC 60529)
Drop resistance	Designed for 2-meter drop resistance
Shock resistance	25g(GB/T 2423.5/IEC 60068-2-27)
Vibration resistance	2g(GB/T 2423.10/IEC 60068-2-6)
RoHS Directive	Compliant
Physical parameters	
Operating temperature	-20~50°C
Storage temperature	-40–70°C, without battery
Relative humidity	<95%RH
Dimensions	243mm*95mm*150mm
Weight	770g
Battery weight	150g
Housing material	Hard plastic: PC+ABS, soft rubber: TPE, magnesium alloy, aluminum alloy
Mounting Method	Support tripod connection with UNC 1/4-20 interface
Warranty and maintenance	
Warranty period	1-year warranty for the whole unit
Recommended calibration interval	2 Years
Supported languages	
Supported languages	English, German, French, Spanish, Portuguese, Italian, Japanese, Korean, Traditional Chinese, Thai
Standard product configuration	
Standard configuration	Main unit ×1□Rechargeable Lithium Battery□Charging Dock□Power Adapter□USB Type-C to USB cable ×1□32GB TF card□Quick start guide□Packing list

■ Lens

■ Available Models

A252053-B001 Fotric H4Mini

* For additional configurations, please contact us directly.

■ Accessories

● Optional

C251242 Rechargeable Lithium Battery

C251245 Charging Dock

C251237 Power Adapter

C251333 Portable Soft Bag

C251338 Hard Carrying Case