

Soundcam Mikado

Handheld Acoustic Camera for Troubleshooting Noise and Vibration Problems



BENEFITS

- All-in-One Acoustic Camera
- 3D scanning and beamforming (DynaBeam)
- 100 % autonomous due to rechargeable Bosch batteries (available worldwide)
- Completly flexible during measurement
- Use as handheld or mounted on a tripod
- For beginners and experts

APPLICATIONS

- Troubleshooting noise and vibration problems
- Quality management of products and components
- Leakage detection
- Research & development
- Close-up measurements in aerospace, automotive, electronics and appliances, education and research

The Mikado is the perfect solution for troubleshooting noise and vibration problems. The fully mobile device enables measurements from nearly any location.

As a complete package consisting of a microphone array, data recorder, and Microsoft® Surface Pro with the NoiseImage Mobile software, the Mikado includes all components needed for quick and efficient acoustic measurements and analyses.

Data recording and basic analyses in both the frequency and time domains are possible directly on the device. Features such as the touch screen and manual trigger button ensure fast and easy operation. The Mikado can also be easily connected to your workstation for more in-depth analyses with the software Noiselmage Pro.

The array comes with an integrated Intel® RealSense™ depth camera which features Full HD resolution and the ability to record depth information.



Acoustic Camera Mikado set



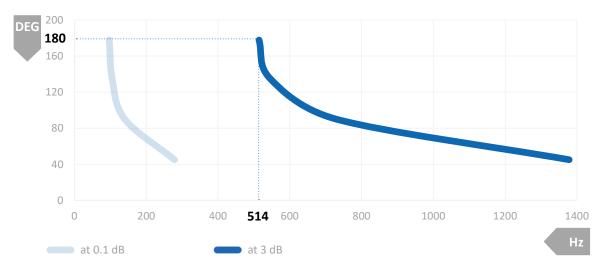
www.gfaitech.com Datasheet



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SIZE AND WEIGHT		
Array-body dimensions	45 x 35 x 15 cm	
Weight	2.2 kg (4.1 kg incl. battery and Microsoft® Surface Pro 9)	
FEATURES		
Video camera	Intel® RealSense™ Depth Camera D435 opening angle 77°	
Resolution	1920 x 1080 (Full HD)	
Sampling rate	48 kS/s	
Additional channels	4 digital channels	
OPERATING CONDITIONS		
Ingress protection code	IP20	
Operating environment	0 °C – 35 °C (handheld operation) -10 °C – 45 °C (desktop operation)	

MICROPHONE DATA		
Microphones	MEMS (Knowles)	
Frequency response	10 Hz – 24 kHz 100 Hz – 5 kHz (< 0.5 dB) 100 Hz – 11 kHz (< 3 dB)	
Max. sound pressure level	121 dB at 10 % THD	
Noise level	30 dB(A)	
Sensitivity (1 kHz, 94 dB SPL)	-26 dBFS	
ARRAY DATA		
Channels	96	
Recommended measurement distance	> 0.3 m (Beamforming) < 0.15 m (acoustic holography)	
Acoustic mapping range	9 dB – 120 dB	
Recommended mapping frequencies	514 Hz – 24 kHz (Beamforming) 30 Hz – 2 kHz with near field (acoustic holography)	
Dynamic range*	15 dB – 27 dB, up to 50 dB with advanced algorithms	



Calculation of the lowest frequency (Hz) at 180° opening angle (DEG)

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^{*} Distance to the source: 1 m; calculation points: 90.000