



192 microphones make sound visible

New possibilities, even more flexibility: gfai tech expands its Acoustic Camera family with the Octagon sound camera. The all-in-one sound camera visualizes acoustic emissions that are invisible to humans. Sophisticated and complex measurements of various sound sources can be performed quickly and accurately.

With the new Octagon system, gfai tech offers a new, smart, time- and labor-saving inspection tool that locates sound sources and visualizes results in real time as a photo or live video. Whether leak detection on buildings and pipelines or fault finding on rotating objects - the Octagon sound camera detects acoustic emissions in the audible and lower ultrasonic range of 30 to 24,000 Hertz. Thus, leaks and existing defects can be precisely eliminated and, among other things, costly consequential damage can be prevented.

The geometry of the microphone array is based on a Fibonacci Spiral of 192 MEMS Microphones and the outer shape is an octagon. The high Microphone density makes the Octagon an excellent system for both Beamforming and Acoustic Holography measurements. The acoustically transparent array design minimizes sound reflections, sound pressure doubling at the surface and reduces resonance effects between the measured object and the array.

The integrated data recorder additionally offers 4 analog and 4 digital input channels. The system connects via Ethernet to a laptop or PC for quick analysis using NoisImage sound analysis software. Images and video recordings enable 3D sound localization. The innovative sound camera can be used in a wide range of applications in research and development, quality assurance, maintenance or environmental acoustics. Octagon is the second all-in-one camera of gfai tech besides the Mikado.

gfai tech GmbH specializes in innovative products and services for the measurement and analysis of sound and vibration "Made in Germany". In 2001, gfai tech launched the world's first acoustic camera. Smallest objects from the size of a cricket to household appliances, via motor and rail vehicles or entire wind power and industrial plants can be acoustically mapped and evaluated with analysis tools.

Images and accompanying technical data sheets for the Octagon can be found [here](#). High-resolution images can be provided on request.

