

SOUNDCAM 2.0 SENSOR

Product data



Highlights

- Real-time results at 100 fps
- IP54 protection
- Suitable for outdoor use
- Audible and ultrasound range
- Streaming via Ethernet (TCP/IP)
- Analysis up to 60 kHz

Applications

- Road/traffic monitoring
- EOL testing/quality assurance
- Condition based monitoring
- Non destructive testing
- Partial discharge localization



SOUNDCAM 2.0 SENSOR

The First Outdoor Sound Camera Sensor



What is SoundCam?

The SoundCam 2.0 Sensor is an acoustic camera covering the audible and ultrasonic frequency ranges. It has a USB and an ethernet interface, which allow connection to a remote PC. The supplied PC software will show the location of acoustic events in real-time at up to 100fps, overlaid on the camera image.

One or more of these sensors can be combined into your own applications to form complex machine monitoring, leak detection, or animal or traffic monitoring networks, for example. Since the ultrasonic range is also included, electrical discharge or arcing can be monitored over vast networks.

The robustness, compact and waterproofed design makes it highly suitable for outdoor use. No other acoustic camera is so robust and flexible, opening up infinite possibilities for new applications!



Hardware

Physical Properties	Dimensions	35 x 35 x 5 cm (13.8 x 13.8 x 2.0 inch)
	Weight	5.6 kg (12.3 lb)
	Waterproof	IP54
	Housing	Aluminium
	Mounting	32 x M6 (8 on each side)
	Operating temp	-20°C to 50°C (-4°F to 122°F)
	Storage temp	-30°C to 60°C (-22°F to 140°F)
Interfaces	USB	data streaming and firmware updates
	Ethernet	LAN for data streaming
Sensors	Microphones	64 digital MEMS
	Frequency range	Up to 60 kHz (recommended)
	Sample rate	200 kHz
	Sound pressure	Max. 120 dB
Optical Camera	Resolution	320x240 (50fps) or 640x480 (16fps)
	Aperture angle	70° (FoV horizontal)
	Shutter	Global shutter
	Type	Digital
	Output	Acoustic map video
Communication	Logical	TCP/IP
	Physical	Ethernet or USB-B
	Power Input	9 - 19V with power adapter

Software features

OS	Windows (for Laptop/PC)
HMI	Keyboard, mouse, headphones
Protection	Password (unauthorized access protection)
Online Performance	Up to 100 acoustic fps, up to 50 optical fps
	Acoustic pictures, optical pictures, FFT and spectrogram
	Listen to local sound (broadband or frequency filtered)
	Place marker while measuring
	Buffer recording, trigger recording (SPL or frequency)
Offline Features	Long term measurements (average and peak-hold)
	Time weighting: fast, slow, impulse
	View acoustic results frame by frame
Export	Save and reload
	Replay in real-time or slow motion
Intuitive Usability	Listen to local sound
	Screenshots, video, sound
	Distance settings
Intuitive Usability	Frequency filters (narrow band, 1/3-octave and octave)
	Dynamic filter and low cut-off
	3 scaling modes: off, auto, smart (crest factor)