

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) |