

SOUNDCAM ULTRA

Product data



Highlights

- Real-time results at 100 fps
- Handheld device with IP54 protection
- Integrated object lighting
- 8 configurable buttons for fast control
- Analysis up to 100 kHz
- Low weight

Applications

- Compressed air/gas leak localization
- Partial discharge localization
- Condition based monitoring
- Animal studies
- Non destructive testing



SOUNDCAM ULTRA

The Smallest Handheld Sound Camera for Everyone

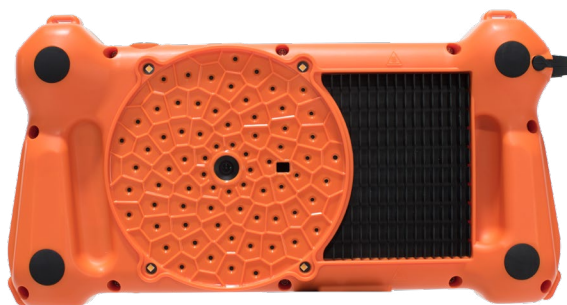


What is SoundCam?

SoundCam Ultra is the first camera that images audible sound and ultrasound. The device locates sound sources in realtime and immediately displays the results on the screen. It is as easy to use as a smartphone.

Its light weight and ergonomic design makes a convenient fit for every maintenance and service tool-kit. The SoundCam Ultra can be used in a broad frequency range up to 100 kHz, which makes it suitable for a wide range of applications e.g. for compressed air leaks and partial discharge localization.

The SoundCam Ultra visualizes complex acoustic information. Analyzing and understanding sounds has never been easier!



Hardware

Physical Properties	Dimensions	31 x 16 x 5.5 cm (12.2 x 6.3 x 2.2 inch)
	Weight	1.5 kg (3.3 lb)
	Waterproof	IP54
	Operation	Two or one-handed
	Battery	Life ~ 3.5 h; fully charged in 1.5 h
	Tripod socket	1/4 inch
	Buttons	8 configurable + power on/off
	Operating temp	-20°C to 50°C (-4°F to 122°F)
	Charging temp	0°C to 45°C (32°F to 113°F)
	Storage temp	-30°C to 60°C (-22°F to 140°F)
Display	Size	7 inch / 15.5 x 8.6 cm
	Resolution	800 x 480 px
	Touch	10 finger capacitive touch
Embedded Controller	Processor	ARM A53 4x1.2 GHz with 1 GB RAM
	Internal storage	32 GB or 512 GB
	OS	Linux for ARM
Interfaces	USB	For data export
	Ethernet	LAN (for running software on laptop/PC)
	Audio	3.5 mm for headphones
Sensors	Microphones	72 digital MEMS
	Frequency range	Up to 100 kHz
	Sample rate	200 kHz
	Sound pressure	Max. 120 dB
Optical Camera	Resolution	320x240 (50fps) or 640x480 (16fps)
	Lighting	4 LEDs
	Aperture angle	70° (FoV horizontal)
	Shutter	Global shutter
Power	Battery	Li-ion rechargeable battery (48 Wh)
	Input	19V with power adapter
	Management	Smart: work and charge simultaneously

Software features

OS	Linux (on SoundCam), Windows (for Laptop/PC)
HMI	Touchscreen, headphones, buttons
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
Export	View acoustic results frame by frame
	Save and reload
	Replay in real-time or slow motion
Intuitive Usability	Listen to local sound
	Screenshots, video, sound
	Distance settings
	Frequency filters (narrow band, 1/3-octave and octave)
	Dynamic filter and low cut-off
	3 scaling modes: off, auto, smart (crest factor)