

# SOUNDCAM 2.0

Product data



## Highlights

- Real-time results at 100 fps
- Handheld device with IP54 protection
- Integrated object lighting
- 8 configurable buttons for fast control
- Audible and ultrasound range
- Analysis up to 60 kHz

## Applications

- Maintenance and servicing
- Health and safety
- NVH, Squeak and Rattle measurement
- Product development
- Noise localization



# SOUNDCAM 2.0

The First Handheld Ultrasound Camera for Everyone





# What is SoundCam?

SoundCam 2.0 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.

The SoundCam 2.0 can be used in a broad frequency range up to 60 kHz, which makes it suitable for a wide range of applications e.g. for product development, predictive maintenance and occupational safety.

The SoundCam 2.0 visualizes complex acoustic information. Analyzing and understanding sound has never been easier!



## Hardware

Physical Properties	Dimensions	34 x 34 x 9.5 cm (13.4 x 13.4 x 3.8 inch)
	Weight	3 kg (7 lb)
	Waterproof	IP54
	Anti-theft system	Kensington lock
	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	64 digital MEMS
	Frequency range	Up to 60 kHz (recommended)
	Sample rate	200 kHz
	Sound pressure	Max. 120 dB
	Resolution	24 bit
Optical Camera	Type	Digital
	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)
	Long term measurements (average and peak-hold)
Offline Features	Time weighting: fast, slow, impulse
	View acoustic results frame by frame
	Save and reload
Export	Replay in real-time or slow motion
	Listen to local sound
Intuitive Usability	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)