

Acoustic Camera

SONASCREEN[®] 2

For Preventive Maintenance

MADE IN GERMANY

Preventive Maintenance

SONASCREEN[®] 2

The most advanced acoustic camera on the market



- Areas of application Leak detection, partial discharge detection, tightness testing, and bio-acoustics
- Most sensitive camera available 176 microphones with 200 kHz for capturing acoustic signals
- **Wide frequency range** Up to 100 kHz for the detection of audible and ultrasonic signals
- High acoustic frame rate Capture fast events with a frame rate of 100 fps

- Intuitive operation Different application modes with preset settings for intuitive operation without extensive training
- Audio converting For precise monitoring of the visually displayed ultrasonic signal
- In-depth recording and analysis The only camera that enables further processing of the recorded raw data
- Flashlight function

- Non-invasive fault detection Allows maintenance professionals to diagnose issues without interrupting operations
- 2-in-1 device Acoustic camera and thermal imaging camera in one device
- **Touch display** 7" multi-touch display with very high resolution
- IP54 protection class Ideally suited for both indoor and outdoor industrial applications









- → Quick and easy localization of leaks
- → Visualization of several leaks in one image
- → Customizable live loss display, e.g. in l/min and \$/year
- → Leakage detection in compressed air, gas and vacuum systems
- → See and hear leaks at the same time



LeakReport Software



- Free software to create and edit reports with location description, loss assessment, and repair status
- Individual processing of leaks
 possible
- Export as PDF



Reports



- Overview of all leaks for compressed air audits
- Documentation of leaks as basis for necessary repairs
- Reporting of potential energy savings

Detection of Partial Discharges Increase your operational safety and system reliability



- → Detect and differentiate electrical partial discharges in the ultrasonic range at the earliest stage
- → Phase-resolved display of different partial discharge types as live PRPD
- → Visualization of several partial discharges in one image
- → Detection of partial discharges from a safe distance, even over long distances



PDReport Software



- Free software for report creation, analysis and rating of electrical partial discharges
- Automatic line frequency detection
- Export as PDF



Reports



- Documentation of defects
 and creation of repair orders
- Automatic differentiation between corona and surface partial discharge
- Display of the acoustic signal as PRPD

SONASCREEN® 2 Acoustic Camera Setting new standards in hardware, performance, and accessibility

- → The SONASCREEN[®] 2 acoustic camera generates acoustic images from the audible and ultrasonic frequency range
- → The device locates (ultra)sound sources in real time and displays the results on the screen
- → In addition, the camera provides acoustic feedback via headphones
- → At the same time, the built-in IR module adds thermal imaging functionality to the device
- → Thus, ultrasound becomes both audible and visible and the detection of anomalies and damaged parts is enhanced by combining acoustic and thermal images



Visualization of a leak in the acoustic image

 The combination of acoustic and thermographic imaging enables a deeper understanding of recorded events



Visualization of the same leak in the thermal image

 The parallel evaluation of acoustic and thermal images allows a more comprehensive diagnosis and analysis

Different Modes Equipped for any application



Easy

Simplified mode with reduced range of functions for easier operation



Pro Expert mode with extended range of functions and adjustable measurement parameters

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Leakage Optimized mode for quick and easy detection of leaks incl. live loss indicator



Partial Discharge Optimized mode for the detection of different types of partial discharges incl. live PRPD display



Network Remote control of the camera via the included PC software

Technical Data

| General Data | |
|------------------------------|---|
| Size | 31 × 16 × 5.5 cm (12.2 × 6.3 × 2.2 inch) |
| Weight | 1.5 kg (3.3 lb) |
| Protection Class | IP54 |
| Operation | One- or two-handed |
| Battery | ~3,5 h; fully charged in 1,5 h; additional ~6,5 h with external battery (optional) |
| Buttons | 8 configurable + power on/off |
| Tripod Mount | 1/4" |
| Operating Temperature | -20 °C to 50 °C (-4 °F to 122 °F) |
| Display Size | 7" / 15 cm × 9.4 cm |
| Resolution | 1280 px × 800 px |
| Touch Display | 10 finger capacitive touch |
| Internal Storage | 1 TB M.2 SSD |
| Ports | |
| USB A 3.0 | Data export |
| Ethernet | LAN (to run the PC software) |
| Audio | 3.5 mm jack for headphones |
| USB C | Charging |
| Sensors | |
| Microphones | 176 digital MEMS |
| Frequency Range | 1 Hz to 100 kHz |
| Sample Rate | 200 kHz |
| Acoustic Image Resolution | 100 fps |
| Sound Pressure | Max. 120 dB |
| Resolution | 24 bit |
| Detection Range | Up to 150 m (492 feet) |
| Optical Camera | |
| Туре | Digital |
| Resolution | 640 × 480 px with 56 fps |
| Lighting | 4 LEDs |
| Aperture Angle | 70° × 55° (FoV horizontal × vertical) |
| Shutter | Global Shutter |
| Power Supply | |
| Input | 19 V with power adapter |

| Functions | |
|-------------------------|--|
| Features Camera | Acoustic images, optical images, FFT and spectrogram; listening to local sound (broadband or frequency- filtered); placing markers during measurement; buffer recording, trigger recording (SPL or frequency- triggered); long-term measurements (average and peak hold); time evaluation: fast, slow, impulsive |
| Features PC-Software | Display acoustic results frame by frame; save and reload; replay in real time or in slow motion; listen to local sound |
| Export | Photo, video, audio, measured data |
| Intuitive Usability | Distance setting; frequency filter (narrow band, 1/3 octave and octave), Dynamic filter and lower cut-off frequency; 3 scaling modes: Off, Auto, Smart (CREST factor) |
| Languages | German, English, Spanish, Croatian, Italian, Japanese, Korean, Polish, Turkish, Chinese |
| Thermal Imager | |
| Sensor Technology | Microbolometer |
| Spectral Range | Long-wave infrared, 8 µm to 14 µm |
| Resolution | 160 × 120 px |
| Effective Frame Rate | 8.7 Hz |
| Thermal Sensitivity | <50 mK |
| Measurement Range | -10 °C to 400 °C (Room temperature) |

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Contact and Support

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