



**NEW!**  
2<sup>nd</sup> Generation

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**
- 2-in-1 device**  
 Acoustic camera and thermal imaging camera in one device
- Touch display**  
 7" multi-touch display with very high resolution
- GPS module**  
 For easy positioning and orientation during partial discharge measurements\*
- IP54 protection class**  
 Ideally suited for both indoor and outdoor industrial applications



Any  
technician  
can use

**SIMPLE**

Visual  
presentation  
of defects

**INTUITIVE**

Real-time  
acoustic results  
at 100 frames  
per second

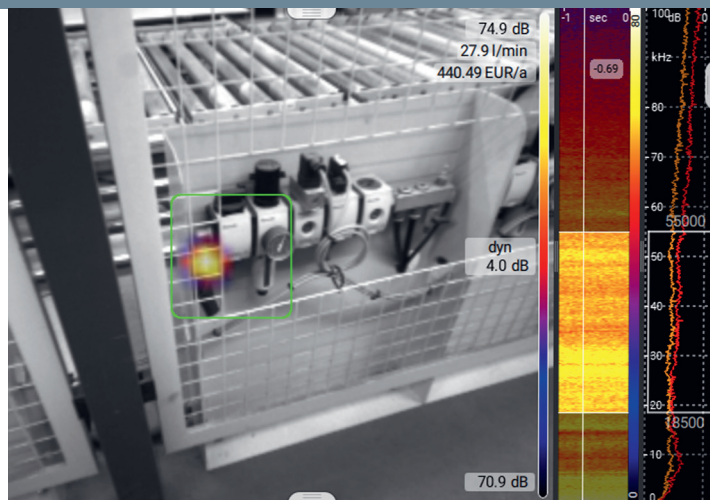
**FAST**

# Leak Detection

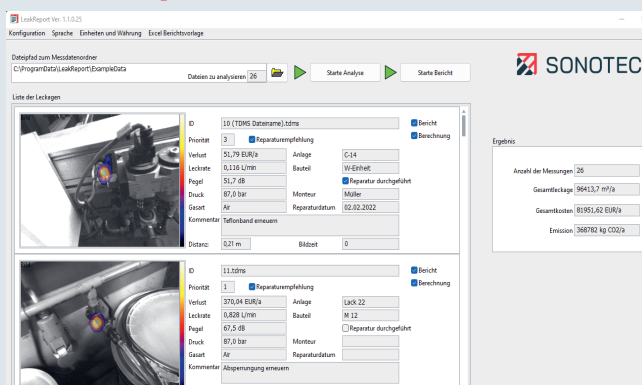
Increase your energy efficiency!



- 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



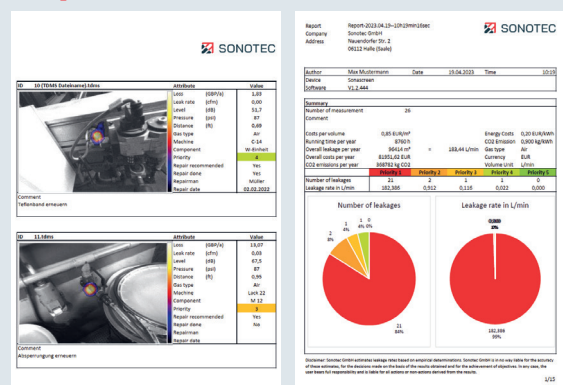
## LeakReport Software



- 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 the compressed air audit
- Necessary repairs can be then carried out from the documented leaks
- Energy savings can be documented

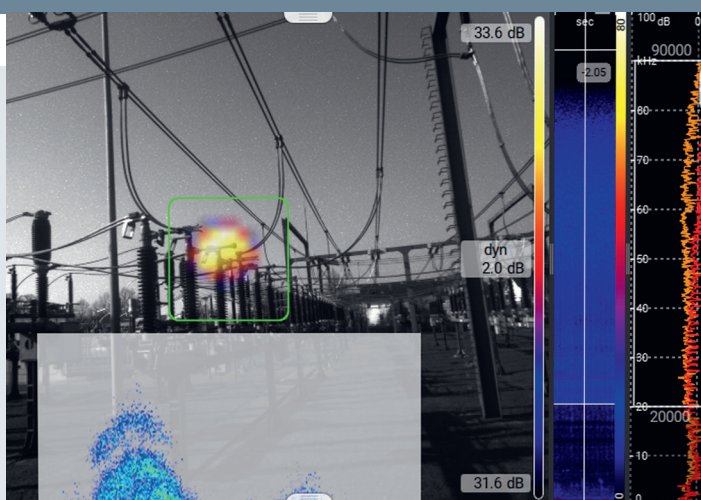


## Detection of Partial Discharges

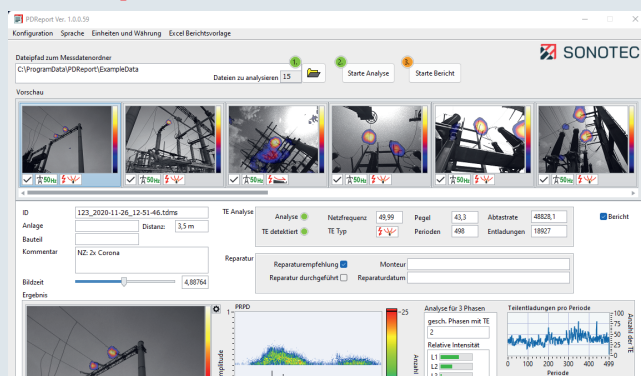
Increase your operational safety and system reliability!



- 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 the analysis and rating of electrical partial discharges
- Automatic line frequency detection
- Export as PDF



## Reports



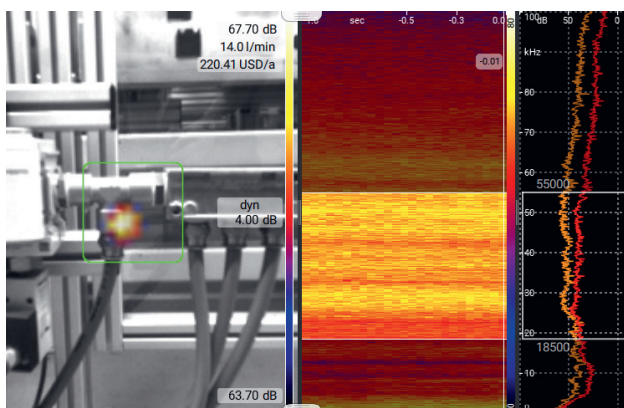
- Documentation of defects and creation of repair orders
- Automatic differentiation between corona and surface partial discharge
- Display of the acoustic signal as PRPD



## SONASCREEN® 2 Acoustic Camera

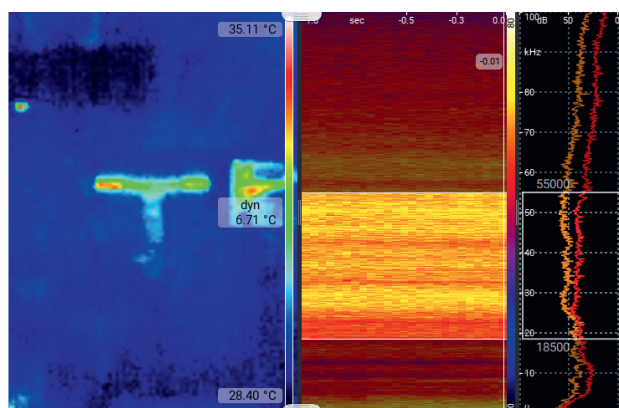
### Setting new standards in hardware, performance, and accessibility

- 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 the functionality of a thermal imaging camera 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 the 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



#### Leakage

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



#### Partial Discharge

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

## Functions

|                             |                                                                                                                                                                                                                                                                                                                |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Features Camera</b>      | 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 |
| <b>Features PC-Software</b> | Display acoustic results frame by frame; save and reload; replay in real time or in slow motion; listen to local sound. slow motion; listen to the local sound                                                                                                                                                 |
| <b>Export</b>               | Photo, video, audio, measured data                                                                                                                                                                                                                                                                             |
| <b>Intuitive Usability</b>  | 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)                                                                                                                                          |
| <b>Languages</b>            | German, English, Spanish, Croatian, Italian, Japanese, Korean, Polish, Turkish, Chinese                                                                                                                                                                                                                        |

## Thermal Imager

|                             |                                     |
|-----------------------------|-------------------------------------|
| <b>Sensor Technology</b>    | Microbolometer                      |
| <b>Spectral Range</b>       | Long-wave infrared, 8 µm to 14 µm   |
| <b>Resolution</b>           | 160 × 120 px                        |
| <b>Effective Frame Rate</b> | 8.7 Hz                              |
| <b>Thermal Sensitivity</b>  | <50 mK                              |
| <b>Measurement Range</b>    | -10 °C to 400 °C (Room temperature) |

\* This function will be activated in a future software update.

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Get exclusive access to free software updates and our support structure!

## Contact and Support

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Certified according to ISO 9001

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