

**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**



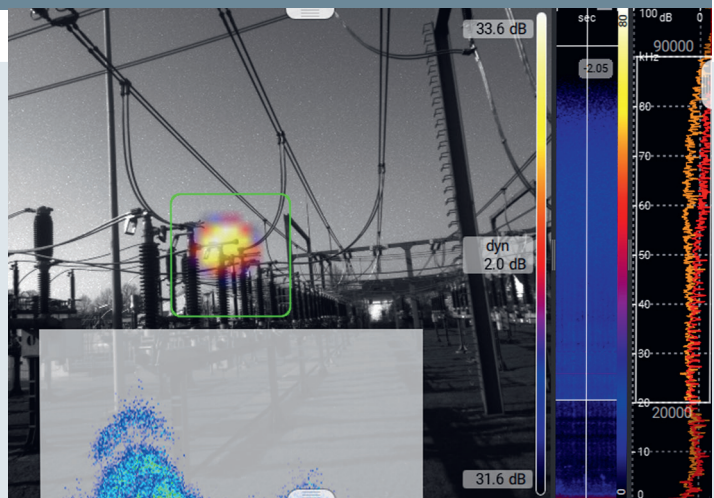


# Detection of Partial Discharges

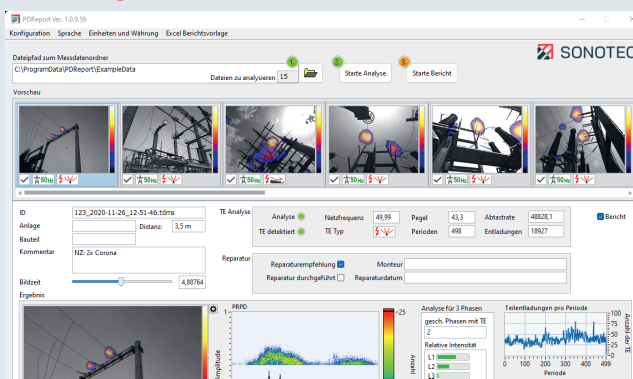
## Increase your operational safety and system reliability!



- 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



## PDRReport Software



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



## Reports

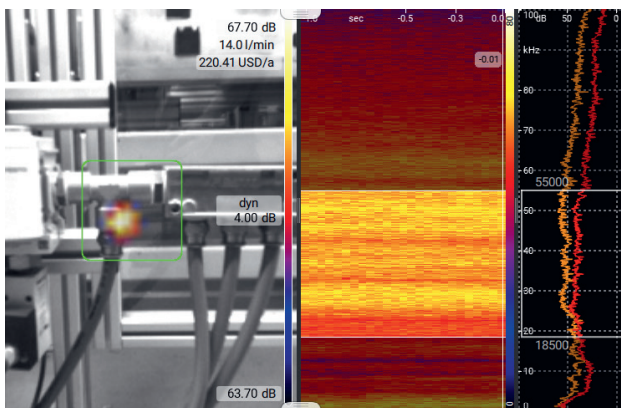


- Documentation of defects and creation of repair orders
- Automatic differentiation between corona and surface partial discharge
- Display of the acoustic signal as PRPD

# SONASCREEN® 2 Acoustic Camera

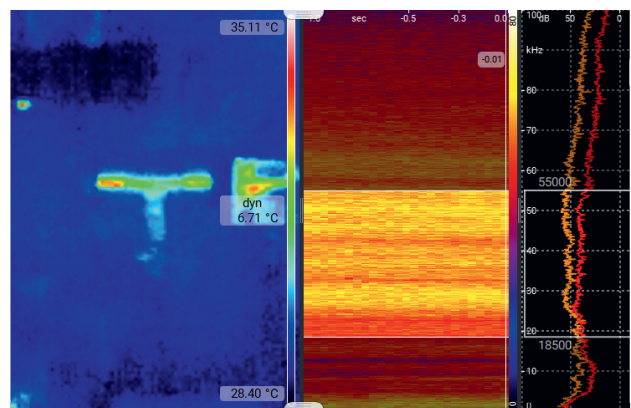
## Setting new standards in hardware, performance, and accessibility

- 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
<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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