

**NEW!**

**SONASCREEN® IR  
with Thermal  
Camera**

Acoustic Camera

**SONASCREEN®**

For Preventive Maintenance

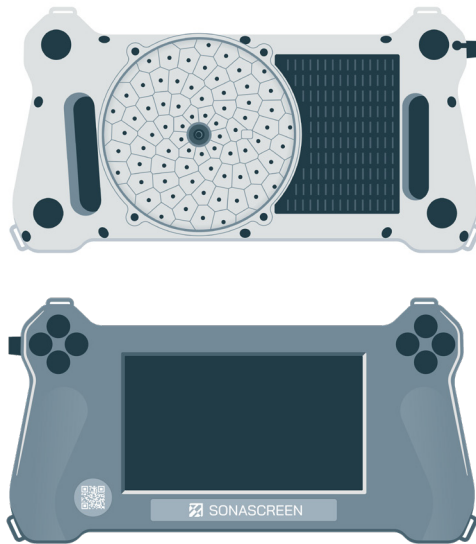
MADE IN GERMANY

Preventive Maintenance

# SONASCREEN® & SONASCREEN® IR

## Acoustic Camera for Preventative Maintenance

- **Application areas**  
Leak location and detection of partial discharges
- **72 sealed microphones**  
For detecting acoustic signals
- **Wide frequency range**  
Up to 100 kHz for capturing audible sound and ultrasound
- **Touch display**  
7" multi-touch display



- **Intuitive operation**  
Leak and partial discharge modes, as well as adjustment options and filters, such as distance adjustment, dynamic filter and scaling modes
- **Flashlight function**  
Using LEDs
- **IP54**  
Best suited for indoor and outdoor industrial operations
- **Integrated infrared sensor (\*IR version)**  
Creation of thermal images



For any technician to use

**Simple**

Through visual presentation of defects

**Intuitive**

Through acoustic results in real-time with 100 frames per second

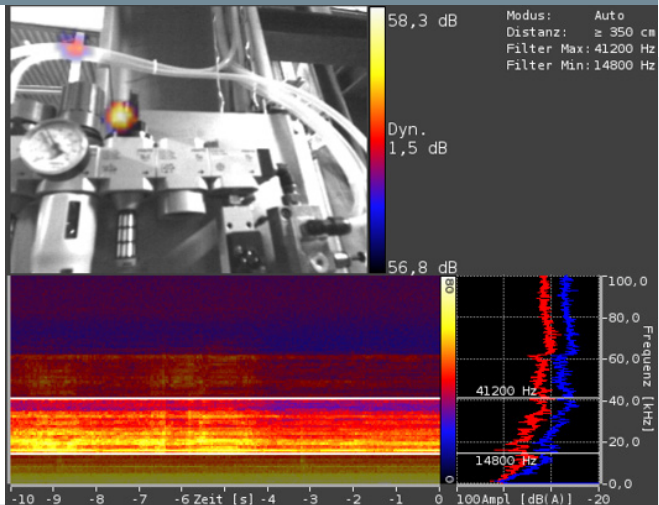
**Fast**



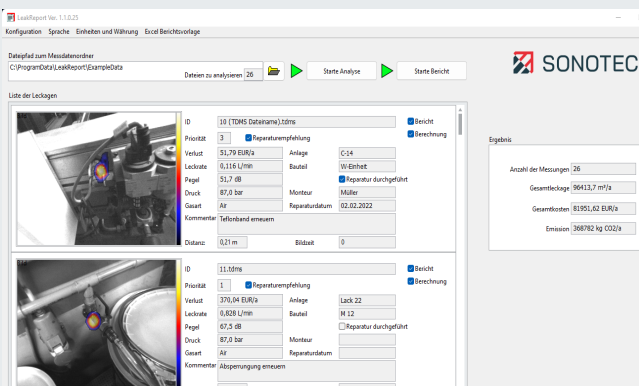
# Leak Detection Increase Your Energy Efficiency!



- Display of multiple leaks in one picture
- Leak detection in compressed air, gas and vacuum systems
- 35% cost savings on compressed air generation
- Simple and fast finding of leaks
- See and hear leaks at the same time



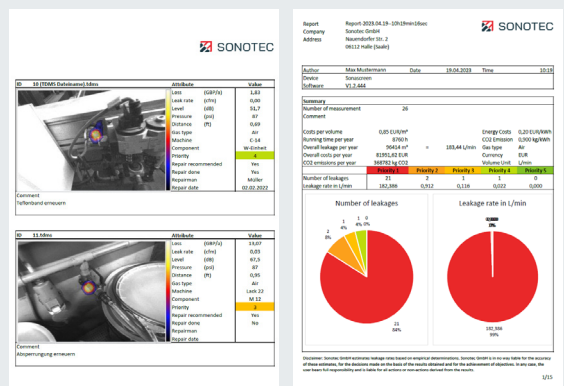
## Software LeakReport



- Free software to create and edit reports, with location description, loss assessment, and repair status
- Export to Excel and PDF



## Reports



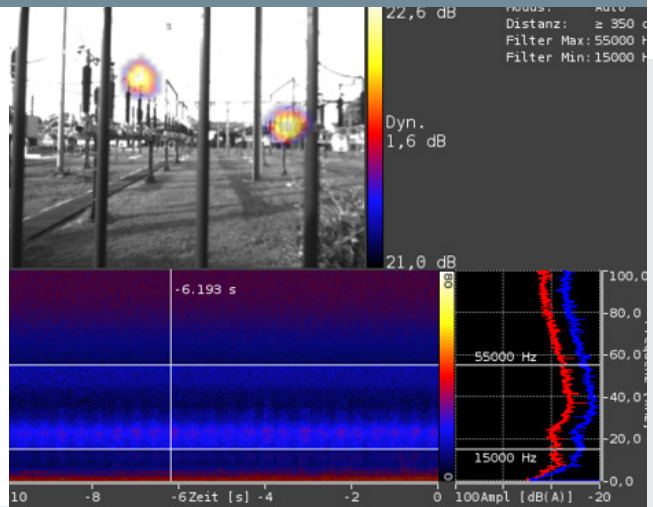
- Overview of all leaks for the compressed air audit
- Necessary repairs can be then carried out from the documented leaks



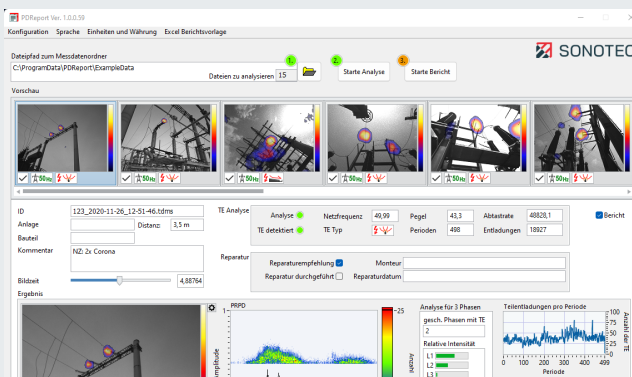
# Detection of Partial Discharges Increase Your Operational Safety!



- Detect electrical partial discharges at the earliest stages
- Recognizing typical acoustic partial discharge signatures
- Display of multiple partial discharges in one picture
- Detection of partial discharges at a safe distance



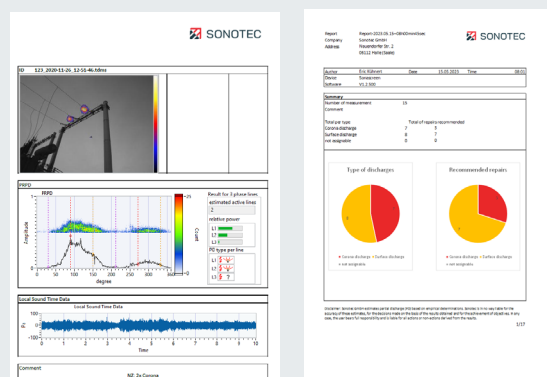
## PDRReport Software



- Free software for the analysis and rating of electrical partial discharges
- Export to Excel and PDF



## Reports

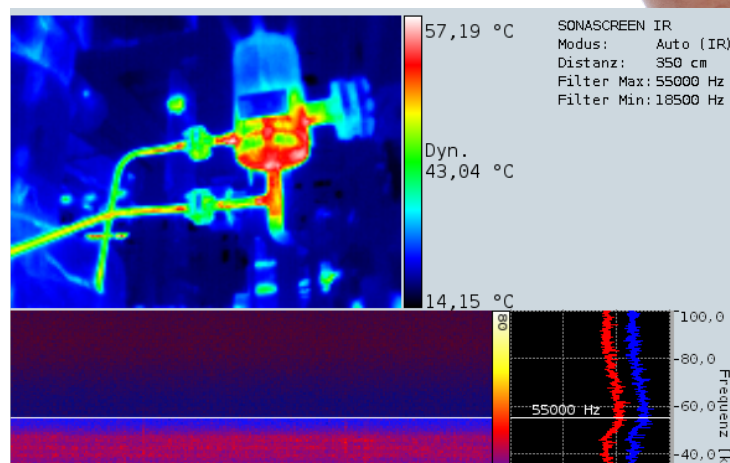
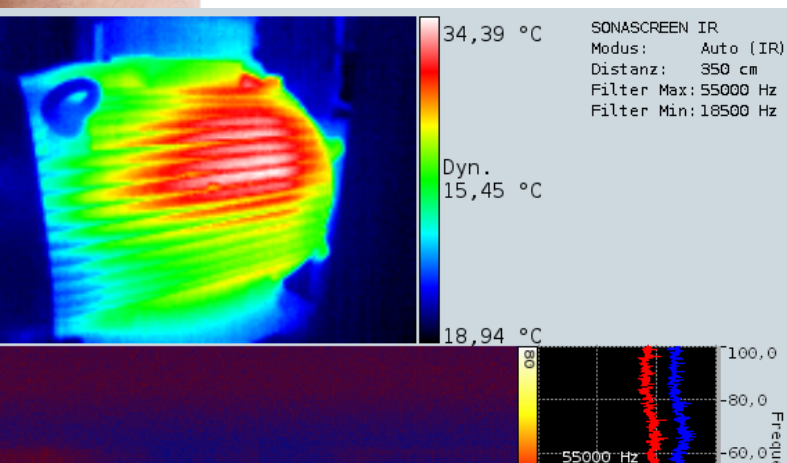
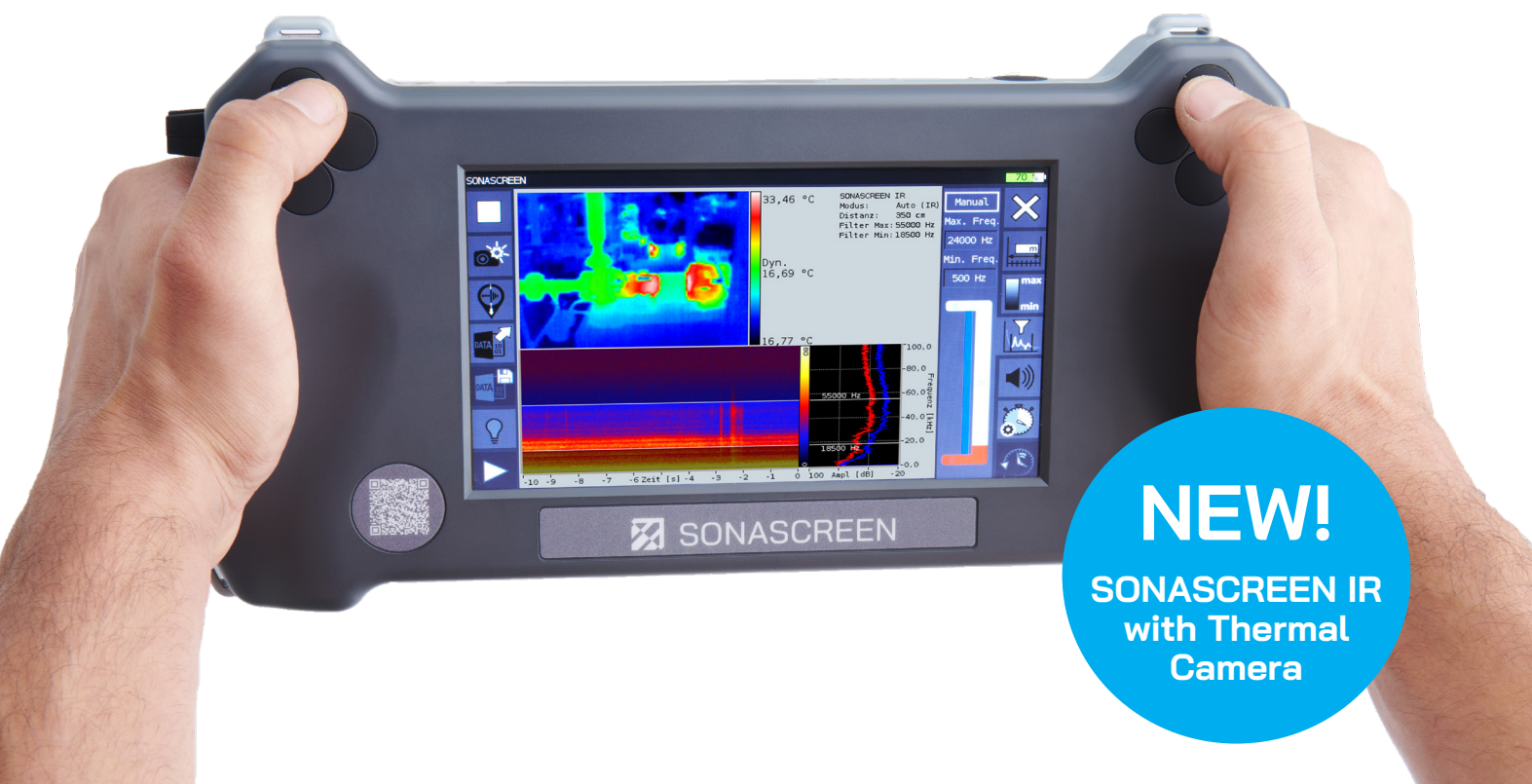


- Documentation of the defect and creation of repair orders
- Automatic differentiation between corona and surface partial discharge
- Display of the acoustic signal as PRPD

# SONASCREEN® IR: Acoustic Thermal Imager

Simple. Intuitive. Fast.

- The SONASCREEN IR acoustic camera generates acoustic images from the audible and ultrasonic frequency range
- The device locates (ultra) sound sources in real time and expands its capabilities with a thermal imaging camera
- The camera also provides acoustic feedback via headphones
- Make ultrasound audible and visible, now with added thermal imaging



# Technical Data

Hardware Features	
<b>Dimension</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>	Life ~ 3.5 h; fully charged in 1.5 h
<b>Buttons</b>	8 configurable, power on/off
<b>Environment Temperature</b>	-20 °C to 50 °C (-4 °F to 122 °F)
Display	
<b>Size</b>	7 inch / 15.5 cm × 8.6 cm
<b>Resolution</b>	800px × 480px
<b>Touch</b>	10 finger capacitive touch
Embedded Controller	
<b>Processor</b>	ARM A53 4 × 1,2GHz with 1GB RAM
<b>Internal Storage</b>	32 GB
<b>OS</b>	Linux for ARM
Sensors	
<b>Microphones</b>	72 digitale MEMS
<b>Frequency Range</b>	From 1 Hz up to 100 kHz
<b>Sample Rate</b>	200kHz
<b>Resolution Acoustic Image</b>	100 fps
<b>Sound Pressure</b>	Max. 120dB
<b>Resolution</b>	24 bit
<b>Detection Range</b>	Up to 150m
Optical Camera	
<b>Type</b>	Digital
<b>Resolution</b>	320 × 240 (50 fps) or 640 × 480 (16 fps)
<b>Lighting</b>	4 LEDs
<b>Aperture Angle</b>	70° (FoV horizontal)
<b>Shutter</b>	Global shutter
Power Supply	
<b>Input</b>	19 V with power adapter

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

Software Features	
<b>Operation System</b>	Linux (camera), Windows (laptop/PC)
<b>HMI</b>	Touchscreen, headphones, buttons
<b>Protection</b>	Password (unauthorized access protection)
<b>Features Camera</b>	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); Time weighting: fast, slow, impulse
<b>Features PC-Software</b>	View acoustic results frame by frame; Save and reload; Replay in real-time or slow motion; Listen to local sound
<b>Export</b>	Screenshots, video, sound
<b>Intuitive Usability</b>	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)
IR module (only included in IR version)	
<b>Spectral range</b>	Long-wave infrared, 8 µm to 14 µm
<b>Resolution</b>	160 × 120 Pixel
<b>Effective Frame Rate</b>	8,7 Hz
<b>Thermal Sensitivity</b>	<50 mK
<b>Measurement Range</b>	High gain mode: -10°C to 140°C Low gain mode: -10 °C to 400 °C (room temperature) -10°C to 450°C (typical)
<b>Optimal Operating Temperature Range</b>	-10 °C to 80 °C
<b>Input Noise Level</b>	2nV/√Hz**

## Contact & Support

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Certified according to ISO 9001

SONOTEC® is a registered trademark

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