SONOTEC

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

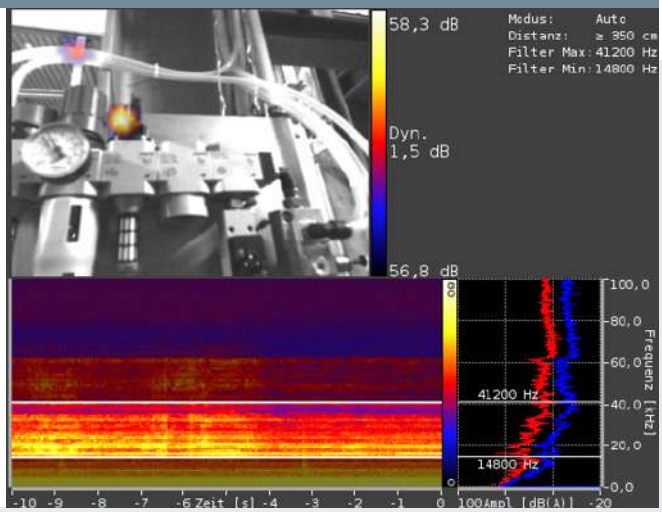
Intuitive

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

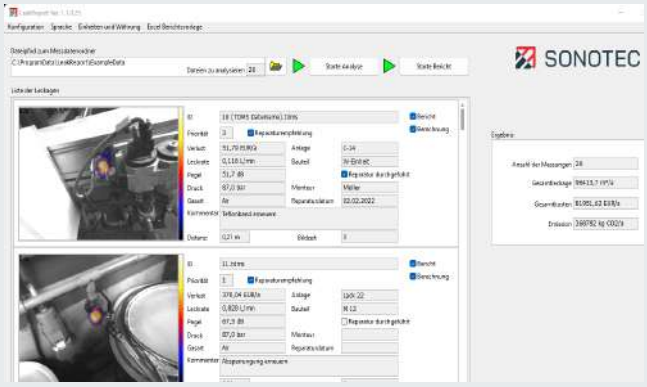
Fast

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



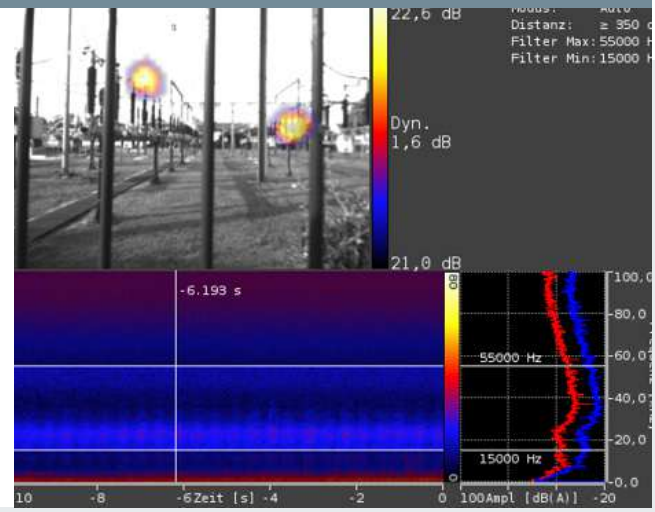
- Free software to create and edit reports, with location description, loss assessment, and repair status
- Export to Excel and PDF

Reports

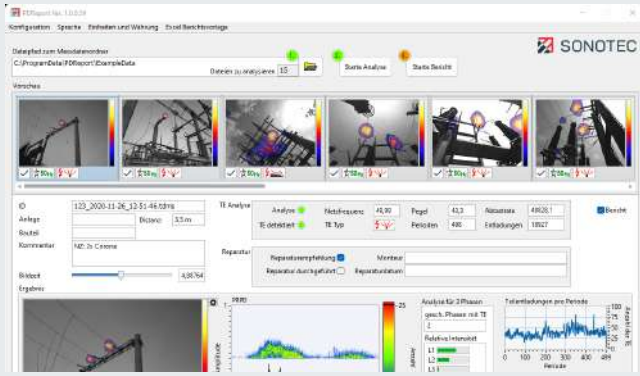
- Overview of all leaks for the compressed air audit
- Necessary repairs can be then carried out from the documented leaks

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

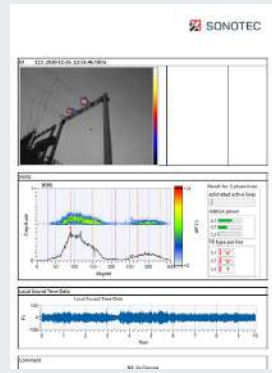


PDReport Software



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

Reports

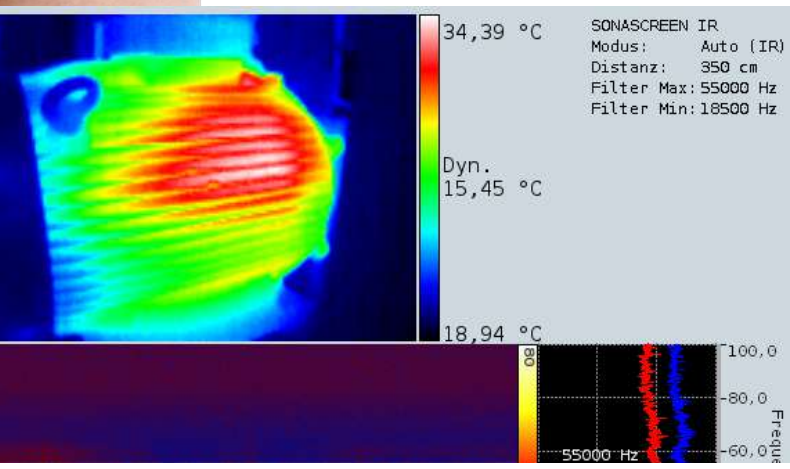


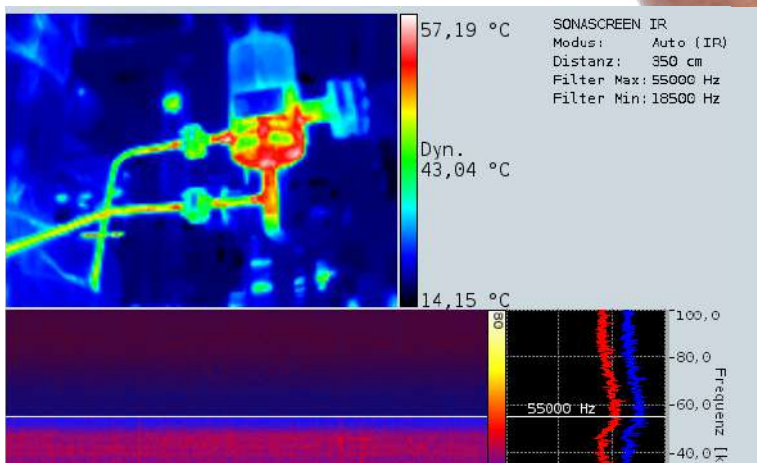
- Documentation of the defect and creation of repair orders
- Automatic differentiation between corona and surface partial discharge
- Display of the acoustic signal as PRPD

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

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

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