

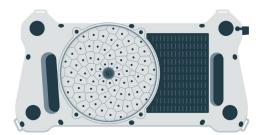




SONASCREEN® & SONASCREEN® IR

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

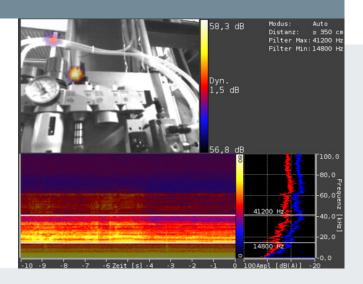
Through
acoustic results
in real-time with
100 frames per
second

Fast

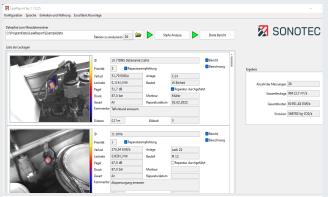
Leak Detection Increase Your Energy Efficiency!



- → 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



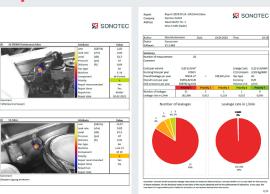
Software LeakReport



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



Reports

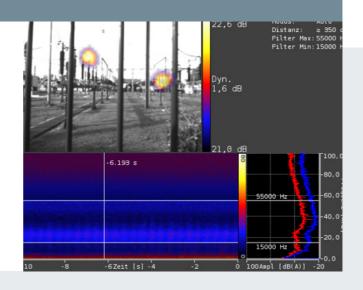


- Overview of all leaks for the compressed air audit
- Necessary repairs can be then carried out from the documented leaks

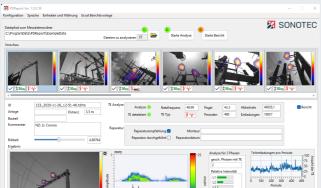
Detection of Partial Discharges Increase Your Operational Safety!



- → 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



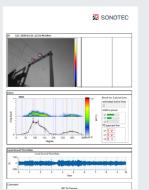
PDReport Software



- 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	
Туре	Digital
Resolution	320×240 (50fps) or 640×480 (16fps)
Lighting	4 LEDs
Aperture Angle	70° (FoV horizontal)
Shutter	
Siluttei	Global shutter
Power Supply	Global shutter

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

Linux (camera), Windows (laptop/PC)
Touchscreen, headphones, buttons
Password (unauthorized access protection)
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
View acoustic results frame by frame; Save and reload; Replay in real-time or slow motion; Listen to local sound
Screenshots, video, sound
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 Opera- ting Temperature Range	-10 °C to 80 °C
Input Noise Level	2nV/√Hz**



Contact & Support

SONOTEC GmbH Nauendorfer Str. 2 06112 Halle (Saale) Germany **%** +49 345 133 17-0

www.sonotec.eu

⊘ Certified according to ISO 9001