

NEW! 2nd Generation

Acoustic Camera

SONASCREEN® 2

For Preventive Maintenance

MADE IN GERMANY

Preventive Maintenance

ES 127

ES France - Département Bio-tests & Industries 127 rue de Buzenval BP 26 - 92380 Garches



Tél. 01 47 95 99 90 Fax. 01 47 01 16 22



e-mail : bio@es-france.com Site Web : www.es-france.com

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

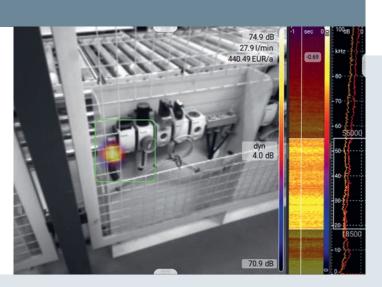


 $[\times]$

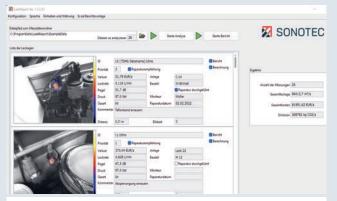




- → Quick and easy localization of leaks
- → Visualization of several leaks in one image
- → Customizable live loss display, e.g. in I/min and \$/year
- → Leakage detection in compressed air, gas and vacuum systems
- → See and hear leaks at the same time



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





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

Tél. 01 47 95 99 90 Fax. 01 47 01 16 22

SONASCREEN

Ğ

Ca LeakReport

7

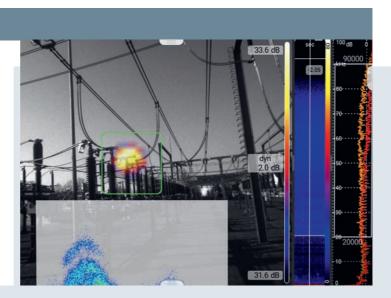
 $\left[\times\right]$



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

Tél. 01 47 95 99 90 Fax. 01 47 01 16 22

SONASCREEN

Ż

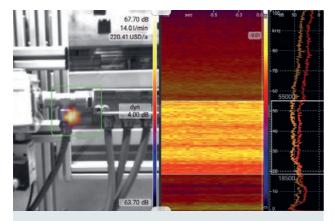
PDReport

6 22



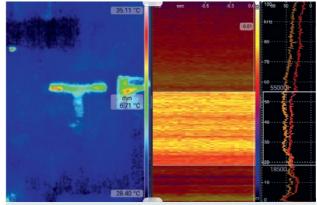
SONASCREEN® 2 Acoustic Camera Setting new standards in hardware, performance, and accessibility

- → 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*



ES France - Département Bio-tests & Industries 127 rue de Buzenval BP 26 - 92380 Garches



Tél. 01 47 95 99 90 Fax. 01 47 01 16 22





Technical Data

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

Functions	
Features Camera	Acoustic images, optical images, FFT and spectrogram; listening to local sound (broadband or frequency-filte- red); placing markers during measu- rement; buffer recording, trigger re- cording (SPL or frequency-triggered); long-term measurements (average and peak hold); time evaluation: fast, slow, impulsive
Features PC-Software	Display acoustic results frame by frame; save and reload; replay in real time or in slow motion; listen to local sound
Export	Photo, video, audio, measured data
Intuitive Usability	Distance setting; frequency filter (narrow band, 1/3 octave and octa- ve), Dynamic filter and lower cut-off frequency; 3 scaling modes: Off, Auto, Smart (CREST factor)
Languages	German, English, Spanish, Croatian, Italian, Japanese, Korean, Polish, Turkish, Chinese
Thermal Imager	
Sensor Technology	Microbolometer
Spectral Range	Long-wave infrared, 8 µm to 14 µm
Resolution	160 × 120 px
Effective Frame Rate	8.7 Hz

Rate	0.0.1.2
Thermal Sensitivity	<50 mK
Measurement Range	-10 °C to 400 °C (Room temperature)

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

mySONAPHONE.com

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

SONOTEC® is a registered trademark





Tél. 01 47 95 99 90 Fax. 01 47 01 16 22

