

# SONAPHONE-Family

## PRODUCT OVERVIEW PREVENTIVE MAINTENANCE



# Product Overview

## Preventive Maintenance

### Our SONAPHONE-Family

#### **SONAPHONE**

The new SONAPHONE extends the product range of SONOTEC with a digital ultrasonic testing device including touchscreen technology. This device for maintenance 4.0 is a hit with users thanks to apps that are intuitive to operate and opens up new domains of application in connection with innovative sensors.

#### **SONAPHONE *Pocket***

The compact ultrasonic testing device SONAPHONE *Pocket* is characterized by an optimal price–performance ratio. The smallest testing device of the SONAPHONE family is intuitive to use and is applied primarily for leak detection on compressed air, gas and vacuum systems in preventive maintenance.

#### **SONAPHONE E**

Due to its intrinsically safe construction, the SONAPHONE E is suitable for the use in the most hazardous areas and potentially explosive atmospheres. For maintenance staff on fixed offshore platforms, in petrochemical plants and other areas where a potentially explosive atmosphere may be present, the ultrasonic testing device is an essential part for numerous inspection tasks.



**SONAPHONE**  
Digital ultrasonic  
testing device for  
maintenance 4.0



**SONAPHONE Pocket**  
The smallest  
testing device of the  
SONAPHONE-family



**SONAPHONE E**  
ATEX certificated for  
the use in areas with  
risk of explosion

# SONAPHONE

## Digital Testing Device for Maintenance 4.0

### Discover the New Device Class from SONOTEC

The digital ultrasonic testing device combines novel sensors and software that can be operated intuitively for preventive maintenance. Innovative airborne and structure-borne sound sensors that can be connected to the multi-function testing device with just one simple motion, pave the way for new domains of use. The mobile handheld device is operated via touchscreen and is the ideal companion throughout the entire test procedure. Besides test values and spectrograms, it is also possible to store photographs, voice memos and comments relating to the measuring points. With only a few clicks you receive a test report and can prove management your contribution to energy efficiency and process optimization.

#### **Applications**

- ✓ Leak detection and classification on compressed air, gas and vacuum systems
- ✓ Tightness testing of unpressurized systems
- ✓ Detection of partial discharges
- ✓ Condition monitoring of machinery
- ✓ Steam trap and valve inspection

#### **Advantages**

- ✓ Intuitive thanks to touchscreen technology
- ✓ Robust housing
- ✓ Broadband ultrasonic analysis from 20 to 100 kHz
- ✓ Store test data and spectrograms
- ✓ Create test reports with just a few clicks

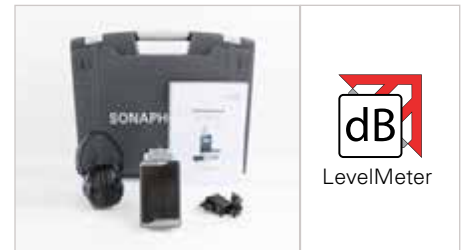


# SONAPHONE

## Digital Testing Device for Maintenance 4.0

### SONAPHONE Basic Set

Consisting of: digital ultrasound testing device SONAPHONE, software LevelMeter, peltor headphones, transport case, power supply, user documentation  
Item Number: 700 01 0293



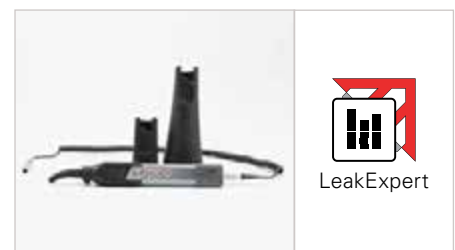
### Sensor Set Airborne Sound

Consisting of: airborne sound sensor BS10, attachments: precise locator BS10-1, small acoustic horn BS10-2, large acoustic horn BS10-3, user documentation  
Item Number: 700 01 0294



### Application Set LeakExpert

Consisting of: airborne sound sensor BS10, LeakExpert App, attachments: precise locator BS10-1, small acoustic horn BS10-2, large acoustic horn BS10-3, user documentation  
Item Number: 700 01 0295



## Upgrade LeakExpert

Consisting of: LeakExpert App,  
user documentation  
Item Number: 600 01 0046



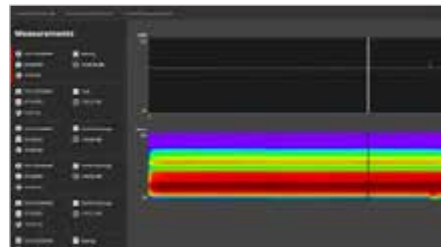
## Sensor Set Structure-Borne Sound & Temperature

Consisting of: structure-borne sound & temperature sensor BS20, waveguides: short waveguide 22 mm BS20-1, long waveguide 150 mm BS20-2, magnetic waveguide BS20-3, set of keys for changing the waveguides, user documentation  
Item Number: 700 01 0284



## DataViewer for LevelMeter App

PC software (Windows 7 and later version) for LevelMeter visual presentation of sound levels, time signals and spectrograms  
Item Number: 600 01 0043



# SONAPHONE

## Digital Testing Device for Maintenance 4.0

### Protection Set

Consisting of: protective cover for the housing,  
protective foil for the display, carrying strap  
Item Number: 700 01 0283



### Spare Parts

### Item Number

SONAPHONE digital ultrasonic testing device	700 01 0301
SONAPHONE sensor cable	800 01 0049
Airborne sound sensor BS10	200 01 0299
Precise locator BS10-1	700 01 0296
Small acoustic horn BS10-2	400 01 0145
Large acoustic horn BS10-3	400 01 0148
Structure-borne sound & temperature sensor BS20	200 01 0300
Short waveguide 22 mm BS20-1	300 01 0099
Long waveguide 150 mm BS20-2	300 01 0098
Magnetic waveguide BS20-3	300 01 0097
Set of keys for structure-borne sound & temperature sensor	500 01 0097
International power supply	400 01 0136
Transport case	400 01 0137
Peltor ear protection headphones	400 01 0138





While other ultrasonic testing devices can only find leaks, **SONAPHONE** can also be used to classify their size at the same time. Based on methods of aeroacoustics **SONOTEC** developed the world's latest process for classification of leaks for the newest generation of **SONAPHONE** testing devices. The results of the patent-pending methods are plausible values for the classification of the leak size and for estimation of the savings potential.

# SONAPHONE *Pocket*

## The Smallest Testing Device of the SONAPHONE-Family

### Compact Design for Your Pocket

With the SONAPHONE *Pocket* you identify problems even before they arise and create value at all levels of your company. Numerous preventive maintenance tasks can be handled quickly and efficiently with the compact ultrasonic testing device from SONOTEC. Find leaks in compressed air, gas and vacuum systems and lower your energy costs. Detect bearing damage and avoid downtimes. Provide evidence for electrical insulation damage and increase your operational safety. The SONAPHONE *Pocket* is easy to handle and very effective.

#### **Applications**

- ✓ Leak detection on compressed air, gas and vacuum systems
- ✓ Tightness testing of unpressurized systems
- ✓ Detection of partial discharges
- ✓ Condition monitoring of machinery

#### **Advantages**

- ✓ Compact design for your pocket
- ✓ Easy to handle
- ✓ Illuminated display
- ✓ Extensive accessories allow versatile options for use



# SONAPHONE *Pocket*

## The Smallest Testing Device of the SONAPHONE-Family

### SONAPHONE *Pocket* - Basic Set

Consisting of: SONAPHONE *Pocket*, noise protected stereo headphones with coiled cable, transport case, lanyard, batteries, user documentation

Item Number: 700 01 0279



### SONAPHONE *Pocket* - Leak Detection Set

Consisting of: SONAPHONE *Pocket*, airborne sound probe L 50, directional tube with tip, acoustic horn for airborne sound probe L 50, leak tags (25 pcs.), noise protected stereo headphones with coiled cable, transport case, lanyard, batteries, user documentation

Item Number: 700 01 0277



### Application Set Leak Detection

Consisting of: airborne sound probe L 50, directional tube with tip, acoustic horn, leak tags (25 pcs.)

Item Number: 700 01 0280



### Airborne Sound Probe L 50

For leak detection, tightness testing and  
detection of partial discharges  
Item Number: 100 01 0336



### Structure-borne Sound Probe L 51

For valve inspection  
Item Number: 100 01 0149



### Structure-borne Sound Probe L 52

For testing of progression and abrasions  
of bearings  
Item Number: 100 01 0150



# SONAPHONE *Pocket*

## The Smallest Testing Device of the SONAPHONE-Family

### Flexible Airborne Sound Probe L 53

For pipes difficult to access  
Item Number: 100 01 0151



### SONOSPOT L 55

Parabolic probe to pinpoint leakages precisely  
over long distances and to localize electrical  
partial discharges  
Item Number: 100 01 0350





# SONAPHONE E

## For the Use in Areas with Risk of Explosion

### ATEX Certificated

Due to its intrinsically safe construction, the SONAPHONE E is suitable for the use in the most hazardous areas and potentially explosive atmospheres. For maintenance staff on fixed offshore platforms, in petrochemical plants and other areas where a potentially explosive atmosphere may be present, the ultrasonic testing device is an essential part for numerous inspection tasks.

#### Applications

- ✓ Leak detection on compressed air, gas and vacuum systems
- ✓ Tightness testing of unpressurized systems
- ✓ Detection of partial discharges
- ✓ Condition monitoring of machinery
- ✓ Steam trap and valve inspection

#### Advantages

- ✓ Approved for potentially explosive atmospheres
- ✓ Integrated data logger
- ✓ Data transfer between device and computer
- ✓ Temperature measurements up to 800 °C
- ✓ Fast amortisation
- ✓ Robust housing







# SONAPHONE E

## For the Use in Areas with Risk of Explosion

### SONAPHONE E Basic Set

Consisting of: SONAPHONE E (Ex ia IIC T4 Gb resp. Ex ia IIB T4 Ga according to ZELM 03 ATEX 0130X), head phone (high sound deadening), carrying strap, transport case, user documentation

Item Number: 700 01 0167



### Application Set Leak Detection

Consisting of: airborne sound probe L 60, directional tube with tip, acoustic horn, leak tags (25 pcs.), extension cable 30 cm

Item Number: 700 01 0168



### Application Set Steam Trap Testing

Consisting of: structure-borne sound probe L 62 with stainless steel tip, surface temperature sensor (Tmax = 800°C), extension cable for temperature sensor

Item Number: 700 01 0169



### Structure-borne Sound Probe L 61

For valve inspection  
Item Number: 100 01 0020





### Structure-borne Sound Probe L 62

For condition monitoring of machinery  
Item Number: 100 01 0018



### Flexible Airborne Sound Probe L 63

For pipes difficult to access  
Item Number: 100 01 0021



### SONAPHONE E Communicator

SONAPHONE E Communicator; incl. USB  
cable and software for data transfer to  
the PC (on CD)  
Item Number: 600 01 0008



# SONAPHONE T und SONOSPHERE

## Ultrasonic Transmitter for the Reliable Detection of Leaks

### Tightness Testing of Unpressurized Systems

The mobile ultrasonic transmitter SONAPHONE T is designed for the rapid and reliable detection of seal failures on windows, doors, cabins, vehicles and containers. Used in addition with an ultrasonic receiver from the SONAPHONE series, the SONAPHONE T enables efficient tightness testing. The advantage of the method lies in how simple it is to handle. The transmitter emits ultrasound that passes through leaks and gaps of the test object. By using a SONAPHONE testing device these signals can be detected accurately from outside the object. The option of using the additional omnidirectional spherical transmitter SONOSPHERE enables the testing of both very large and awkwardly-shaped areas. This all-round carefree package is the ideal solution for challenging inspection tasks.

#### **Applications**

Tightness Testing:

- ✓ Of road and railed vehicles
- ✓ In ship and aircraft building
- ✓ Of fire doors and climate cabinets
- ✓ On doors and windows
- ✓ Of pipe systems and containers
- ✓ Of clean rooms

#### **Advantages**

- ✓ Modulation of transmission signal
- ✓ Adjustable sound intensity
- ✓ Easy to handle, without costly jigs
- ✓ Robust and ergonomic design
- ✓ Cost-effective method



# SONAPHONE T & SONOSPHERE

## Ultrasonic Transmitter for the Reliable Detection of Leaks

### SONAPHONE T & SONOSPHERE SET

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Consisting of: SONAPHONE T V2.0,  
SONOSPHERE spherical transmitter L 56 with  
magnetic- and suction cup holder,  
batteries, lanyard keychain, tripod,  
bag with carrying strap, user documentation  
Item Number: 700 01 0143



### SONAPHONE T V2.0

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Ultrasonic transmitter with adjustable intensity  
to detect defect seals in conjunction with L 50 or  
L 56 (not for use in areas with risk of explosion)  
Item Number: 200 01 0201



### SONOSPHERE L 56

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Spherical transmitter for SONAPHONE T V2.0  
Item Number: 100 01 0237

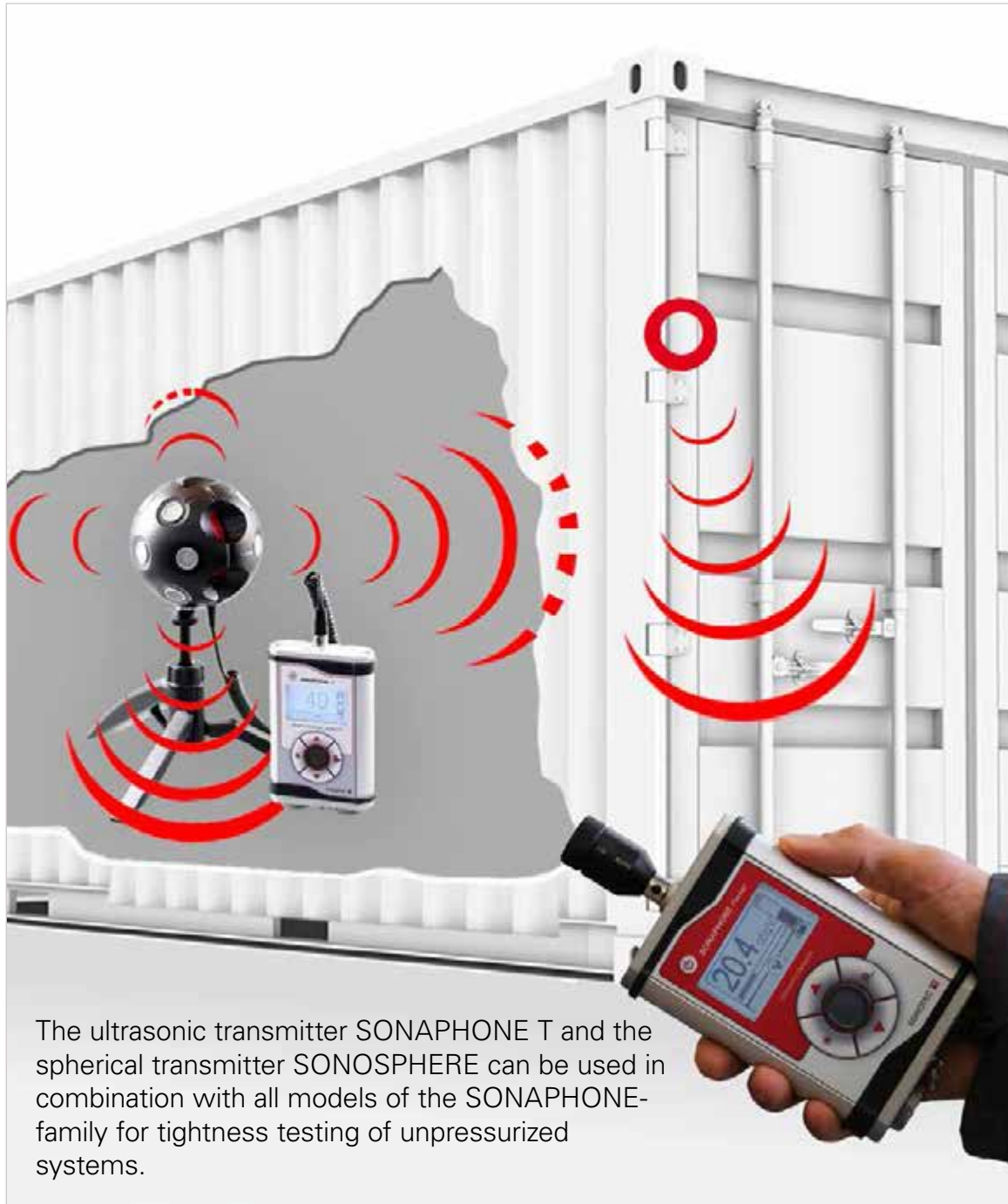


### Airborne Sound Probe L 50

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As transmitter for SONAPHONE T V2.0  
Item Number: 100 01 0336





The ultrasonic transmitter SONAPHONE T and the spherical transmitter SONOSPHERE can be used in combination with all models of the SONAPHONE-family for tightness testing of unpressurized systems.

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SONOTEC preserves the right to  
change technical specifications  
without further notice.

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SONOTEC 

 **TERMOGRAM**<sup>®</sup>  
En Monitoreo de la Condición con la mejor... Tecnología