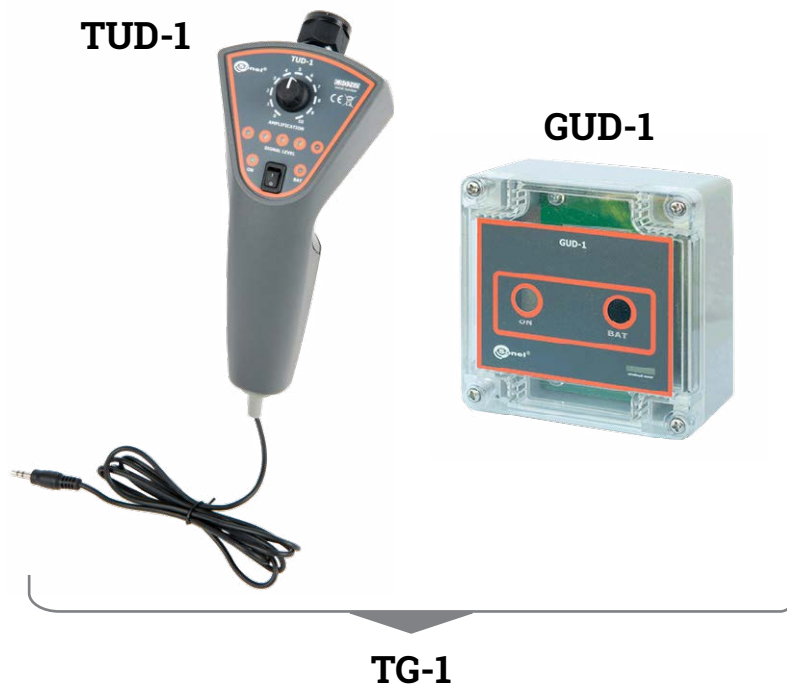


**TG-1**  
index: WMGBTG1

**TUD-1**  
index: WMGBTUD1

**GUD-1**  
index: WMGBGUD1

**Hear the  
inaudible**



## Features

### TUD-1

- Identification of acoustic-wave defects in the range of ultrasounds (40±1) kHz
- Stepless adjustment of gain
- Easy and clear interpretation of results visually on the LED scale and acoustically via the earphones
- Additional probes selected for different methods of analyzing the leakage spot

### GUD-1

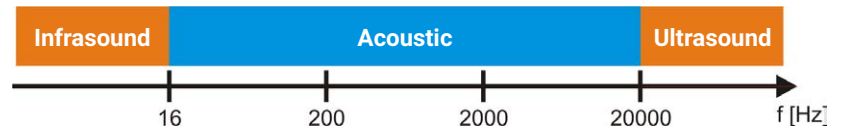
- GUD-1 generator for objects of the same pressure





## Description of the product

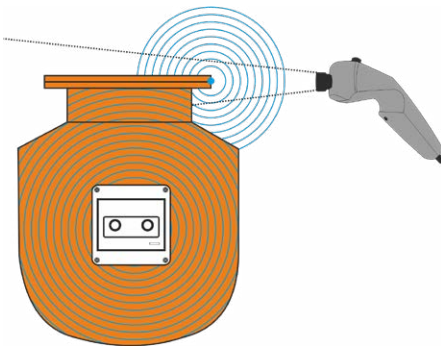
**Sonel TUD-1** is a compact, portable device that receives airborne ultrasonic waves and transforms them into acoustic waves in a range that is audible for the human ear.



Additionally, the unit strengthens the waves and presents the signals via the LED scale and via sounds in the earphone set.

**Sonel TUD-1** is a professional device that allows:

- sources of electrical discharge to be located on such elements as power grid lines, insulators, generators, transformers;
- the search for leaks in pneumatic and hydraulic systems
- leak checks on systems that supply water and gas, such as pipelines, taps, valves, hydraulic components, pumps, compressors;
- diagnostics of the condition of mechanical components, including bearings, gears, drive shafts, pumps, compressors, generators.



**Sonel GUD-1** generator is dedicated to cooperate with TUD-1 detector as an alternative source of ultrasound for emission testing purposes. Generated ultrasound waves have a frequency adjusted to the reception level of the frequency detector.

The device can generate ultrasounds in places, where gas or air leak itself does not have enough pressure to generate a detectable signal. GUD-1 allows to:

- assess unpressurized tanks,
- detect cracks and holes.



## TUD-1 | Technical specification

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center frequency of the detection range	(40±1) kHz
dynamic range	≥60 dB
power consumption	≤0.35 W
power supply	9 V battery (6LR61 / MN1604)
battery run-time	≥20 h
weight incl. battery	≤0.22 kg   0.5 lbs
dimensions	190 x 60 x 70 mm   7.5" x 2.4" x 2.8"
relative operating humidity	80% at +20°C   68°F
operating temperature	-20...+45°C   -4...+113°F
max. operating altitude	2000 m   6562 ft
storage temperature	-20...+60°C   -4...+140°F
storage humidity	80% at temp. up to 31°C   88°F linearly decreasing to 50% with temp. increasing to 40°C   104°F

## GUD-1 | Technical specification

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frequency of the generated ultrasound	(40±1) kHz
sound power	0.0016 W
power consumption	≤0.02 W
power supply	9 V battery (6LR61 / MN1604)
weight with battery installed	≤0.28 kg   0.6 lbs
dimensions	100 x 100 x 80 mm   3.9" x 3.9" x 3.1"
relative humidity	not exceeding 80% at +20°C   68°F
operating temperature range	-20...+45°C   -4...+113°F

## TG-1 | Standard accessories



**TUD-1 ultrasonic detector**

WMGBTUD1



**GUD-1 ultrasonic generator**

WMGBGUD1



**2 x 6LR61 9 V battery (MN1604)**



**Acoustic probe type 1**

WASONAKU1



**Acoustic probe type 2**

WASONAKU2



**Acoustic probe type 3**

WASONAKU3



**Cap protecting the ultrasonic sensor**



**Headphones**

WAPOZSLU1



**MicroUSB cable**

WAPRZUSBMICRO



**M6 carrying case**

WAFUTM6



**Declaration of verification**

## TUD-1 | Standard accessories



**Acoustic probe type 1**

WASONAKU1



**Acoustic probe type 2**

WASONAKU2



**Acoustic probe type 3**

WASONAKU3



**Cap protecting the ultrasonic sensor**



**Headphones**

WAPOZSLU1



**MicroUSB cable**

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**M6 carrying case**

WAFUTM6



**6LR61 9 V battery (MN1604)**



**Declaration of verification**

## GUD-1 | Standard accessories



**6LR61 9 V battery (MN1604)**



**Declaration of verification**