Ultrasonic leakage detection set





Features

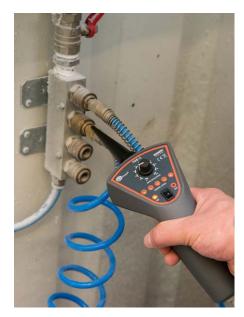
TUD-1

- 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.

Infrasound		Acoustic		Ultrasound	
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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:

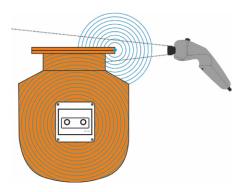
- sources of electrical discharge to be located on such elements as power grid lines, insulators, generators, transformers;
- the search for leaks in pneumatic and hydraulic systems
- leak checks on systems that supply water and gas, such as pipelines, taps, valves, hydraulic components, pumps, compressors;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

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

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



Headphones WAPOZSLU1



Cap protecting the ultrasonic sensor



M6 carrying case WAFUTM6



Declaration of verification

TUD-1 | Standard accessories



Acoustic probe type 1 WASONAKU1



Acoustic probe type 2 WASONAKU2



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Acoustic probe
type 3
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WASONAKU3



Headphones WAPOZSLU1



Cap protecting the ultrasonic sensor



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Declaration of verification



M6 carrying case WAFUTM6



6LR61 9 V battery (MN1604)

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GUD-1 | Standard accessories



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Declaration of verification