



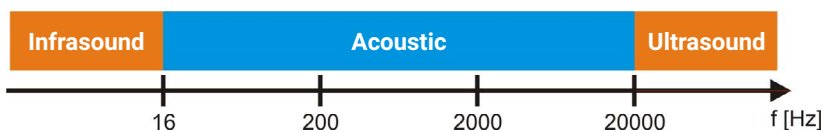
Hear the inaudible

Features

- 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 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 is a part of the ultrasonic leakage detection set. It can generate ultrasonic signals in places, where gas or air leak does not have enough pressure to generate ultrasonic sound. GUD-1 allows to:

- assess unpressurized tanks,
- detect cracks and holes.



Technical specification of TUD-1 detector

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
dimensions	190 x 60 x 70 mm
relative operating humidity	80% at +20°C
operating temperature	-20...+45°C
max. operating altitude	2000 m
storage temperature	-20...+60°C
storage humidity	80% at temp. up to 31°C linearly decreasing to 50% with temp. increasing to 40°C

Technical specification of GUD-1 generator

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
dimensions	100 x 100 x 80 mm
relative humidity	not exceeding 80% at +20°C
operating temperature range	-20...+45°C

Standard accessories



TUD-1 ultra-sonic detector
WMGBTUD1



GUD-1 ultrasonic generator
WMBGUD1



**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



User manual