



ID: P3.1-361

Type: e-Poster

for infrasound monitoring systems

Thursday, 1 July 2021 11:45 (15 minutes)

The microbarometer for infrasound monitoring systems was developed by FSUE VNIIA, the leading organization of the State Atomic Energy Corporation Rosatom for the implementation of the CTBT.

The microbarometer is used to receive infrasonic vibrations of atmospheric pressure and is intended for use in facilities of the CTBT International Monitoring System.

Compared to existing analogues, the developed microbarometer provides a low level of intrinsic noise, high long-term stability of -10 years' characteristics and has a built-in system for monitoring performance.

Main characteristics:

- operating frequency range, Hz from 0.01 to 20;
- maximum amplitude of infrasounds oscillations, Pa 150;
- SKZ of own noise in frequency band 0.02-4.0 Hz, mPa less than 1;
- Range of operating temperatures from minus 40 to 50 °C;
- operable after exposure:
 - Maximum reduced (minus 55 °C) and increased (60 °C) temperatures;
 - after immersion in water at a depth of 1m;
 - after falling from a height of 0.75m.

Promotional text

Compared to existing analogues, the developed microbarometer provides a low level of intrinsic noise, high long-term stability of -10 years' characteristics and has a built-in system for monitoring performance.

Primary authors: Mr INDRISHENOK, Oleg (All-Russia Research Institute of Automatics named after N.L. Dukhov (VNIIA), Moscow, Russian Federation); Mr ZAGUZOV, Vadim (All-Russia Research Institute of Automatics named after N.L. Dukhov (VNIIA), Moscow, Russian Federation)

Co-authors: Mr ORLEANSKY, Igor (All-Russia Research Institute of Automatics named after N.L. Dukhov (VNIIA), Moscow, Russian Federation); Mr BYALIK, Aleksandr (All-Russia Research Institute of Automatics named after N.L. Dukhov (VNIIA), Moscow, Russian Federation); Mr KONOVOODOV, Yuriy (All-Russia Research Institute of Automatics named after N.L. Dukhov (VNIIA), Moscow, Russian Federation); Mr BASOV, Mikhail (All-Russia Research Institute of Automatics named after N.L. Dukhov (VNIIA), Moscow, Russian Federation)

Presenter: Mr INDRISHENOK, Oleg (All-Russia Research Institute of Automatics named after N.L. Dukhov (VNIIA), Moscow, Russian Federation)

Session Classification: T3.1 e-poster session

Track Classification: Theme 3. Verification Technologies and Technique Application: T3.1 - Design of Sensor Systems and Advanced Sensor Technologies