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Test results of the high-resolution, low power, portable microbarometer

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The REF TEK high dynamic range micro barometer combines rugged construction design with wide bandwidth and low noise to ensure accurate measurements in most applications. The micro barometer measures the infrasound signals in the frequency range from 0.02 to 4 Hz with the atmospheric pressure measurement range from 0.001 Pa to 100 Pa. The sensor does not require any altitude adjustments. The micro barometer is housed in a sealed compact case to prevent moisture damage.

Sandia National Laboratories, Ground-Based Monitoring R&D group conducted the test evaluation of the REF TEK micro barometer. The evaluation procedure included the following tests:
1. Output voltage linearity versus input pressure
2. Instrument response verification (sensitivity and pole-zero model)
3. Instrument self-noise, Full-scale and Dynamic range
4. Power

Performing these tests will allow us to comment on the basic performance characteristics for this design of infrasound sensor.

The detailed infrasound station specifications and performance are presented and discussed.