Model 2.2, 2.5

Model 2.2

Model 2.5

Standard Sensitivity:

High	2.00 volts/Pa (0.20 volts/microbar) ± 5%
Low	0.40 volts/Pa (0.04 volts/microbar) ± 5%

Output:

Maximum	18 volts peak to peak

Frequency Response: Flat to within +0, -3 dB from 0.1 Hz to 200 Hz

Sensor Self Noise	4 mPa RMS, 0.1 - 40 Hz in low sensitivity
Output Impedance	200 ohms in series with 330 mfd

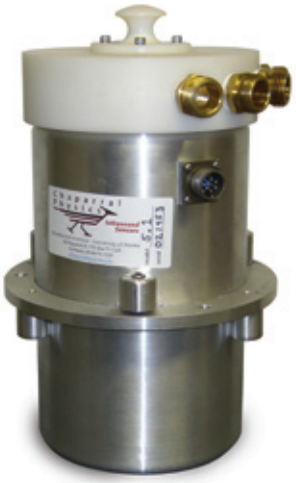
Power Requirements:

DC Source	12 volts, (9-18 volts) DC 24 volts DC (22 to 36 volts) special order
Current Drain	Typically 34 ma @ 12 v, typically 7 ma @ 24 volts
Operating Temperature	-40° F to +150° F (-40° C to +65° C)
Humidity	<95% (non-condensing)

Physical Dimensions: Sensor will function in any position

Size	Model 2.2 – 8 in. (20.3 cm) high with legs Model 2.2 – 7.25 in. (18.4 cm) diameter Model 2.5 – 5.25 in. (12.7 cm) high, 9.25 in. (23.5 cm) diameter including hose connectors
Weight	Model 2.2 – 4 lbs. (1.8 kg) Model 2.5 – 6.6 lbs. (3 kg)
Acoustic Inlet	Various options. Model 2.5 shown with GHT male 4 port manifold.

Model 5.1



Model 5.1

Standard Sensitivity:

High	0.40 volts/Pa (0.04 volts/microbar) ± 5%
Low	0.10 volts/Pa (0.01 volts/microbar) ± 5%

Output:

Maximum	18 volts peak to peak

Frequency Response: Flat to within +0, -3 dB from 0.02 Hz to 50 Hz

Sensor Self Noise	4 mPa RMS, 0.1 - 40 Hz in low sensitivity
Output Impedance	200 ohms in series with 2200 mfd

Power Requirements:

DC Source	12 volts, (9 to 18 volts) DC (24-36 volts DC, available by special order)
Current Drain	Typically 34 ma @ 12 v, typically 7 ma @ 24 volts
Operating Temperature	-40° F to +150° F (-40° C to +65° C)
Humidity	<95% (non-condensing)

Physical Dimensions: Sensor will function in any position

Size	13 in. (33 cm) high with legs 8.875 in. (22.54 cm) diameter
Weight	9 lbs. (4.1 kg)
Acoustic Inlet	Choose from a variety of inlet manifolds available. Typically four male garden hose threads (1 - 12 ports special order), connections and a calibration port.

Chaparral Physics

Division of the Geophysical Institute University of Alaska Fairbanks
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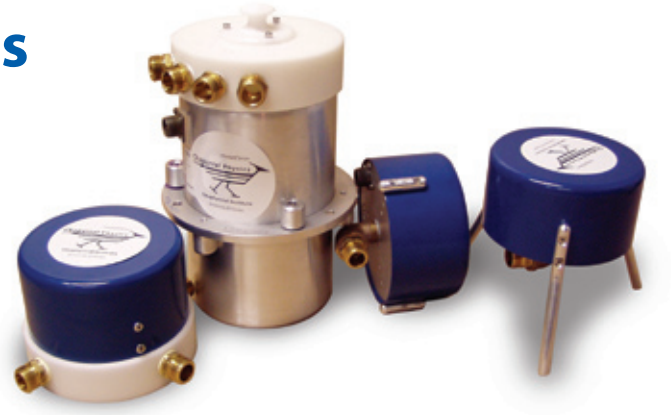
Chaparral Physics



New Developments in Infrasound Sensor Technology

Chaparral Physics, formerly Chaparral Physics Consultants of NM, has made the move to the Geophysical Institute at the University of Alaska Fairbanks. Here, preserving the best of Chaparral, we have implemented a continuous quality and product improvement program.

The University of Alaska, founded in 1917, is a Land, Sea and Space Grant University which currently has over 8,000 employees in three main campuses and 12 smaller branches. The Geophysical Institute was originally founded as a United States Government research institution in 1946; it was transferred to the University of Alaska in 1959. The Institute employs 450 people, including 90 research faculty, and is now the major research institution in Alaska.

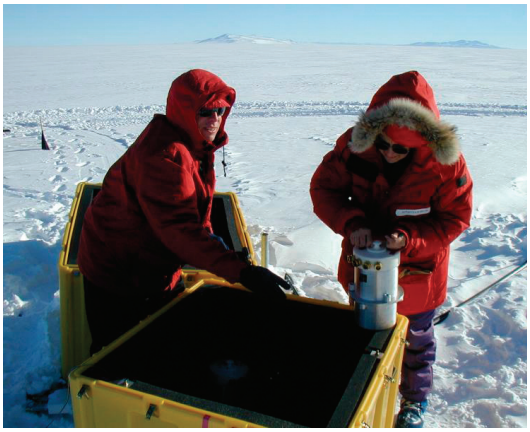
The University's commitment to Chaparral Physics ensures a solid future for high quality infrasound sensors. Microphone construction and testing now takes place in up-to-date machine and electrical shops. All calibrations are performed within a special low noise facility, further contributing to the high level of quality control. Chaparral Physics will continue to improve product design and sensitivity by working with customers to develop additional features on existing models or develop specialized models.

The Chaparral Model 2 family is the successor to the original Model 100 microphone of the 1960's. The Model 2, the longstanding workhorse in near infrasound band (0.1 — 200 Hz), is available in several variations including options in power supplies and dynamic ranges.

For the full infrasound band, we offer the Model 5.1 with a flat response from 0.02 — 50 Hz. The 5.1 is well suited for distant detection of volcano eruptions, nuclear treaty monitoring and scientific research.

The Model 5.1 sensor is the only infrasound sensor designed to be calibrated, while in use in the field or vault, without removal or disconnection from the monitoring system. It is also less expensive, more sensitive, less noisy and far less subject to vibrations and seismic signals than the competing model.

All Chaparral models use very little power, allowing smaller power sources, decreased operating cost and greater return on investment. In addition, our sensors can operate at any altitude without need for adjustment. Whether you are operating in the bitter cold of Antarctica or the shimmering heat of the desert, Chaparral Physics infrasound sensors will consistently provide you with excellent data. Call us for solutions to your future acoustic sensor needs.



The Model 5.1 is installed inside a plastic vault at IS55, Antarctica.

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