



Angular Velocimeters R-2 with magnetohydrodynamic calibration input are the basis for constructing the most modern seismic systems recording all 6 components of mechanical motion. R-2 has a high sensitivity for the detection of rotational modes of earthquakes, a wide dynamic and frequency range. A characteristic feature of the R-2 is low noise with minimal power consumption, which is a significant advantage over electro-mechanical, fiber-optic and other types of rotational motion sensors. This device has a calibration input, which allows to perform periodic calibration without use of special expensive equipment. The device is capable of operating at any orientation in space over a wide range of temperatures.

Specifications

Channels	XYZ rotational
Resolution	$6 \cdot 10^{-8}$ rad/s at 1 Hz
Output signal	± 20 V differential, 0.4 rad/s
Dynamic range	117 dB
Self-Noise PSD	-125dB (rel. $1 \text{ rad/s}^2/\sqrt{\text{Hz}}$)
Frequency range	0.033 – 50 Hz (opt. 0.01 – 100 Hz)
Generator constant	50 V/rad/s
Mass centering	none
Installation angle	any
Calibration input	1:1
Temperature range	-15 to + 55 °C (opt. -40 to + 55 °C)
Housing material	aluminum
Dimensions	120x120x100 mm
Weight	1.5 kg
Power supply	10-18 V
Current	30 mA
Connector	14 contact MS3102