



- **Directly Measures Rotational Velocity**
- **High Sensitivity**
- **Low Power Consumption**
- **Rugged Construction**

## R-1 Triaxial Rotational Velocity Sensor

The R-1 is the newest in a line of sensors using state-of-the-art electro-chemical technology. The R-1 triaxial rotational sensor features the highest sensitivity/resolution available in a rotational transducer, over a wide frequency band with no parasitic resonances. It directly measures rotational velocity and is insensitive to translational motion. The rugged packaging is designed for the most demanding environments, complying with Nema 4, 4x and 12; JIC-EGP-1-1967; and IEC 529, IP66 standards. Unlike solid-state type devices, it operates in a wide temperature range, offering a standard operating range of -15C to +55C. Options include an additional three axes of linear force balanced accelerometers providing outputs for all six components of motion.

Specifications	
Resolution @ 1 Hz	5x10E-7 rad/sec
Dynamic Range	106 dB
Sensitivity	50 or 200V/rad/sec
Frequency Band Standard Optional Extended	0.05 to 20 Hz $\pm 3$ dB, velocity flat 0.03 to 50 Hz $\pm 3$ dB
Output Signal (Single Ended)	$\pm 5V$ , $\pm 2.5V$
Clip Level @ 1 Hz	1.0 rad/sec
Parasitic Resonances	None
Operating Temperature Standard Optional Extended	-15C to +55C -45C to +55C.
Crossaxis Sensitivity	nil
Temperature Scale Factor (Dev from 20°C)	<0.03%/°C
Shock	200g
Power Supply	9 to 14 VDC
Supply Current	20 ma
Dimensions	4.7"x4.7"x3.5"
NEMA Rating	4, 4x, 12
Weight	2 lb appx.
Specifications subject to change.	

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