

DATA SHEET

IRD591 Loop Powered Vibration Sensor

SKU: M5910255001000

IRD **Mechanalysis**[®] Limited



OVERVIEW

- Vibration Sensor with 4-20 mA DC Loop Powered Output
- Can be directly integrated with DCS/PLC/SCADA
- Stainless Steel Hermetically Sealed Enclosure
- Round-the-clock, 24x7, 365 days Vibration Monitoring
- 4-20 mA DC Output proportional to 0-25 mm/sec RMS Vibration
- Can be Stud, Adhesive or Magnetically mounted to surface



SPECIFICATIONS

Technical Performance	
Mounted Base Resonance	5 kHz min
Velocity Range	0-25 mm/sec RMS +/- 10% Nominal 80 Hz at 22 Deg C
Frequency Response	10 Hz (600 CPM) to 1 kHz (60k CPM) +/- 5% - ISO10816
Isolation	Base Isolated
Range	50g peak
Transverse Sensitivity	Less than 5%
Mechanical	
Case Material	Stainless Steel SS304
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	150 grams (Nominal)
Screened Cable Assembly	Contact sales@irdmech.com for Options
Connector	2 Pin MS Connector
Mounting Threads	1/4"-28UNF Female
Electrical	
Current Output	4-20 mA output proportional to 0-25 mm/sec RMS
Supply Voltage	15-30 Volts DC (for 4-20 mA)
Settling Time	2 seconds
Output Impedance	Loop Resistance 600 Ohms max at 24 Volts
Case Isolation	>10 ⁸ Ohms at 500 Volts

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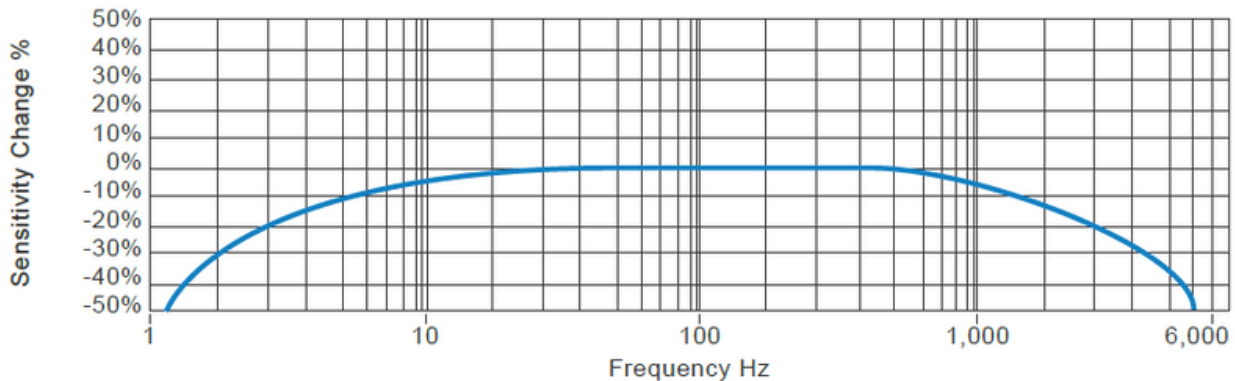
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Environmental	
Operating Temperature Range	-25 to 120 Deg Celsius
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

Typical Frequency Response



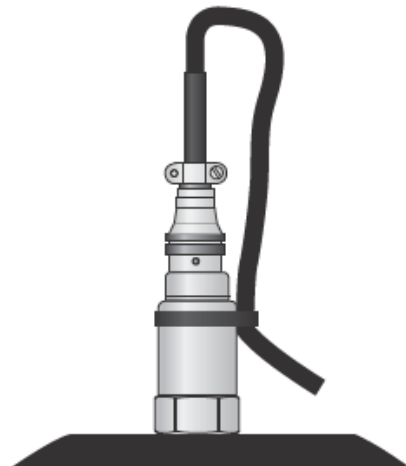
Applications

Fans, Motors, Pumps, Compressors, Centrifuges, Conveyors, Air Handlers, Gearboxes, Rolls, Dryers, Presses, Cooling, VAC, Spindles, Machine Tooling, Process Equipment

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)

To Order

Email us at sales@irdmech.com or call us on +91-2248972000 (Monday to Friday 9AM to 6PM IST) or visit our website www.irdmech.com/ird591



About IRD Mechanalysis Limited

IRD Mechanalysis Limited (a.k.a 'IRD' and 'The Vibration People') is a Provider of Condition Monitoring Solutions to the World since 1962. IRD make Products and Solutions for primarily Vibration Based Condition Monitoring along with instrumentation for Speed, Temperature and Turbine Supervision. IRD completes its offerings by its support Services to complement its Sensors, Meters, Transmitters and Monitoring Systems.