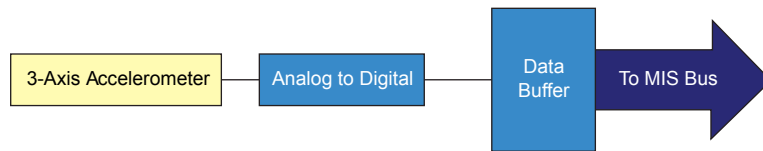


Dynetics Modular Instrumentation System Compensated Inertial Measurement Unit (IMU)

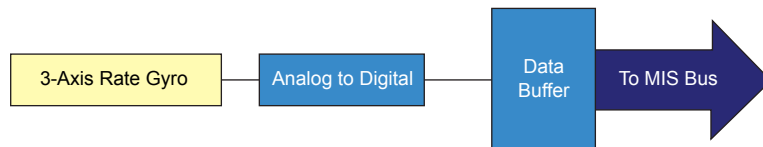
Triaxial Low-Noise Accelerometers

- ♦ +/- 10-g measurement ranges in X, Y, and Z axes
- ♦ 50-Hz, 3-dB bandwidth
- ♦ 50- μ g data resolution
- ♦ Bias drift: 2 mg; cross axis: 0.25% max
- ♦ Scale-factor accuracy: 0.10% of full scale; scale-factor drift: 500 ppm, 1 sigma



Triaxial Rate Gyro

- ♦ +/- 300°/sec measurement range in yaw, pitch, and roll
- ♦ 40-Hz, 3-dB bandwidth
- ♦ 0.0006°/sec data resolution
- ♦ Bias drift: 18°/hr; random walk: 0.2°/hr; cross axis: 0.13% max
- ♦ Scale-factor accuracy: 0.1% of full scale; scale-factor drift: 300 ppm, 1 sigma
- ♦ Stability: 50°/hr/yr



Resolution

- ♦ 12 to 19 bits at 200 SPS (variable)

Interface

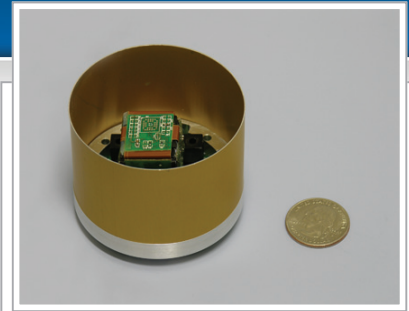
- ♦ Compatible with MIS architecture

Physical

- ♦ Diameter 2.375" min
- ♦ Height 2.316" min
- ♦ Weight 120 g min

Environmental

- ♦ Temperature: MIL-STD 810 E -40 to +85 °C
- ♦ Humidity: 95% noncondensing
- ♦ Vibration: 100 g (0 to 500 Hz)
- ♦ Axial acceleration: MIL-STD 810 E 150 g for 52 sec
- ♦ Shock: 2000 g, sine-wave half cycle



Compensated IMU Highlights

Factory-configurable for a variety of sample rates.

The Dynetics IMU module works in concert with the Dynetics Modular Instrumentation System (MIS) PCM Encoder/Data Recorder and Power Supply Modules to provide a complete data acquisition solution.

For More Information:

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