



LITIS®

COMPACT, LIGHTWEIGHT, HIGH PERFORMANCE MEMS IMU

The latest tactical grade, modular MEMS IMU

LITIS® has the same form factor as SiIMU02® to allow simple system upgrades and provide enhanced capability with less reliance on GNSS aiding. The modular architecture of the LITIS design readily enables the incorporation of specific customer requirements.

Through extensive modeling and hardware testing, Collins Aerospace ensures performance over the lifetime of the product.

As a respected military supplier, we appreciate the need for long-term product availability backed by full customer support.

Collins Aerospace has a long and respected heritage in the design and development of inertial sensors and today specializes in Micro Electro-Mechanical Systems (MEMS) products.



KEY FEATURES & BENEFITS

- Selected by more than 100 customers worldwide – over 250,000 MEMS products delivered
- Used in missile/weapon navigation and platform stabilization
- Rigorous performance and simulated aging ensures conformance to specification throughout life



LITIS®

**PERFORMANCE****FOG Performance**

High performance gyro

Open loop accelerometer performance

PRODUCT BENEFITS

Full 6-DoF and 3 axis rate pack options

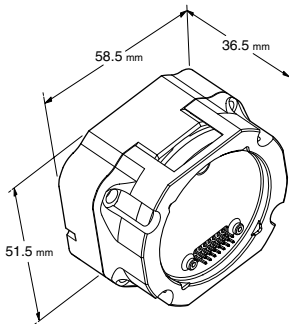
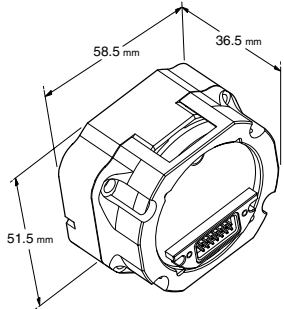
Compact form factor – same as SiIMU02®

Low power and rapid start-up

- Rate and angle modes of operation
- Modular architecture
- ITAR free

KEY CHARACTERISTICS

Volume	65.5 cm ³ in typical housing
Mass	<200 grams in typical housing
Power consumption	≤2.5W
Operating temperature	-55°C to +85°C
Start-up time	300ms
Built-in-test	Start up, Continuous
Gyro operating range	±9000°/s
Accelerometer operating range	±30g to ±140g
Supply voltage	+5V DC
Electrical interface	PC, SDLC, HDLC, AMRAAM (configurable)

**TYPICAL PERFORMANCE****GYRO****ACCELEROMETERS (±30G)**

Bias repeatability (1 σ)*	7°/hr	0.7mg
Bias instability (max)	0.5°/hr	0.1mg
Random walk (max)	0.05°/√hr	0.17m/s/√hr
Scale factor error (1 σ)*	330 ppm (±500°/s)	250 ppm (±1g)
Bandwidth (-90°) (configurable up to)	135Hz	130Hz

Alternate Products

SiIMU02®

**PERFORMANCE****Medium Performance**

Gun Hard options available (20,000g)

IMU25™

**PERFORMANCE****High Performance**

Best-in-class MEMS IMU

Highly modular, tailored solution

Not subject to UK Export Controls

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