MEMS Inertial Measurement Unit

SilMU04®

Atlantic Inertial Systems' SiIMU04® is an all-MEMS system which combines fully compensated 6-DOF angular rate and linear acceleration and dual-axis inclination measurement, suitable for platform navigation, guidance and stabilisation. Miniature high performance silicon accelerometers and Atlantic Inertial Systems' highly successful SiVSG® angular rate sensors are combined in a modular design. This allows performance optimisation of the SiIMU04® to meet specific customer requirements.

- · Affordable, robust and rugged design
- Excellent shock and vibration performance
- · Long life and exceptional reliability
- Comprehensive Built In Test
- · Compact and lightweight
- · Low power consumption and rapid start-up
- Full 6-DOF product with additional dual-axis inclinometer functionality



AIS MEMS PRODUCT PORTFOLIO



First MEMS IMU in military service

Global customer base, MEMS products selected by over 60 export customers

Over 20,000 MEMS products delivered for use on a range of military and aerospace applications

Range of MEMS products available off-the-shelf











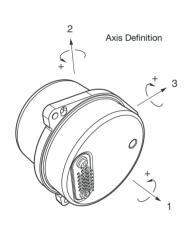


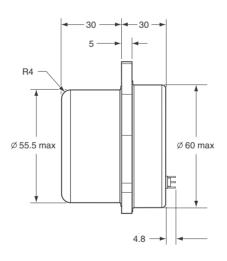


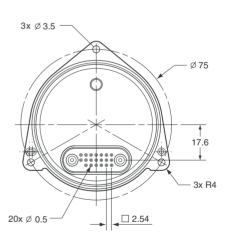
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Angular	Linear	Altitude
±6,00°/s Axis 1 ±150°/s Axis 2 & 3	±6,00°/s Axis 1 ±150°/s Axis 2 & 3	±15°/ Roll ±50°/Pitch
≤650°/hr 1σ	≤100 mg 1σ Axis 1 ≤20 mg 1σ Axis 2 &3	
≤8°/hr	≤3 mg Axis 1 ≤1 mg Axis 2 & 3	
≤0.5°/√hr	≤0.8 m/s/√hr Axis 1 ≤0.25 m/s/√hr Axis 2 & 3	
≤3,000 ppm 1σ Axis 1, 2 & 3	≤15,000 ppm 1σ Axis 1 ≤8,000 ppm 1σ Axis 2 & 3	
<250 gram		
+8V DC		
≤5W		
PC		
>80Hz	>80Hz	>20Hz
Start Up & Continuous		
	±6,00°/s Axis 1 ±150°/s Axis 2 & 3 ≤650°/hr 1σ ≤8°/hr ≤0.5°/√hr ≤3,000 ppm 1σ Axis 1, 2 & 3 <250 gram +8V DC ≤5W PC >80Hz	±6,00°/s Axis 1 ±150°/s Axis 2 & 3 ≤650°/hr 1σ ≤100 mg 1σ Axis 1 ≤20 mg 1σ Axis 1 ≤20 mg 1σ Axis 2 & 3 ≤8°/hr ≤3 mg Axis 1 ≤1 mg Axis 2 & 3 ≤0.5°/√hr ≤0.8 m/s/√hr Axis 1 ≤0.25 m/s/√hr Axis 2 & 3 ≤3,000 ppm 1σ Axis 1, 2 & 3 <250 gram +8V DC ≤5W PC >80Hz >80Hz >80Hz







Dimensions in millimetres





Atlantic Inertial Systems is part of Goodrich Corporation

Clittaford Road Southway

Plymouth Devon PL6 6DE United Kingdom

- **T** +44 (0)1752 695695
- **F** +44 (0)1752 722095
- E infouk@atlanticinertial.com
- W www.atlanticinertial.com

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