

MULTI-AXIAL ACCELEROMETER



The L3 Multi-Axial Accelerometer is designed for use in commercial and military aircraft operating flight recording systems. The hermetically sealed instrument houses single-, dual- or tri-axial sensors for measuring vertical, longitudinal and lateral acceleration. The accelerometer meets the mandatory requirements of the FAA and other regulatory authorities. Compliant to ARINC 542A/573/717/747 and certified to TSO C124b.



FEATURES

- Single-, dual- or tri-axial configurations
- ARINC 542A/573/717/747 compliant
- Certified to TSO C124b
- Hermetically sealed for harsh operational environments
- MTBF > 50,000 hours
- Lightweight
 - 542: 12 oz. (340 g)
 - 717: 8 oz. (227 g)
- Monitor live audio
- Custom configurations
- Direct replacement for other ARINC-compliant accelerometers

Use of U. S. DoD visual information does not imply or constitute DoD endorsement.

MULTI-AXIAL ACCELEROMETER



SPECIFICATIONS

PHYSICAL

Dimensions	Per ARINC 542A/573/717/747	
Weight	542	12 oz. (340 g)
	717	8 oz. (227 g)
Hermetically Sealed		
Connector	MS3113 H12C10P for ARINC 717 and ARINC 542A MS3113 H12C8P for single- and dual-axis	

ELECTRICAL CHARACTERISTICS

Range	AXIS	RANGE	OUTPUT
	Up	+6 g	5000 mV
	Down	-3 g	200 mV
	Forward	+1 g	5000 mV
	Aft	-1 g	200 mV
	Right	+1 g	5000 mV
	Left	-1 g	200 mV
Axial Null	Vertical	1800 mV	
	Longitudinal	2600 mV	
	Lateral	2600 mV	
Excitation	18 to 32 VDC (28 VDC nominal)		
Output	5.0 VDC max		
Accuracy	0.75% FSO		
Resolution	0.01% FSO		
Supply Current	<30 mA 32 VDC excitation (75 is max allowed by 717)		

ENVIRONMENTAL

Temp Operating Range	-65 °F to 160 °F (-55 °C to 70 °C)
Compensated Range	-65 °F to 160 °F (-55 °C to 70 °C)
Thermal Effect on Zero	±0.01% FSO/°F
Thermal Effect on Sensitivity	±0.01% FSO/°F
Vibration	5 to 2000 Hz, 4.12 g random DO-160E Cat. S Curve C DO-160E Cat. H Curve R DO-160E Cat. S Curve L
Shock	Peak acceleration of 6 G minimum, for duration of 11 milliseconds at half-sine wave (DO-160E Cat. A)
Insulation Resistance	100 MΩ minimum at 50 VDC

CERTIFICATION

FAA TSO-C124b



ARINC 542



ARINC 717

L3 accelerometers are directly interchangeable with all ARINC-compliant tri-axis accelerometers and are certified to the latest TSO C124b

REGULATORY SPECS

ARINC 524A/573/717/747

COMPANY CERTIFICATION

L3 Aviation Products Quality Management System is ISO 9001:2008 and AS9100:2009 Rev. C Certified



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L3 Aviation Products is a leading provider of commercial and military avionics, as well as MRO services. We manufacture a diverse line of safety- and efficiency-enhancing products that sets the standard for next-generation cockpit requirements.

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