

# L-3 Aviation Recorders

## MULTI-AXIAL ACCELEROMETER

The L-3 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.



### KEY 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
- Light weight <12 oz (34 kg)
- Custom configurations
- Direct replacement for other ARINC compliant accelerometers



# L-3 Aviation Recorders

## MULTI-AXIAL ACCELEROMETER

### PHYSICAL DIMENSIONS

Dimensions: Per ARINC 542A/573/717/747  
Weight: 12 ounces nominal (340gm)  
Hermetically Sealed  
Connector: MS H12C10P for tri-axis and ARINC 542A, MS H12C8P for single and dual-axis

### ELECTRICAL CHARACTERISTICS

Range:	AXIS	RANGE	OUTPUT
	Up	+6g	5000mV
	Down	-3g	200mV
	Forward	+1g	5000mV
	Aft	-1g	200mV
	Right	+1g	5000mV
	Left	-1g	200mV

Axial Null: Vertical: 1800mV; Longitudinal: 2600mV; Lateral: 2600mV  
Excitation: 18 to 32VDC (28VDC nominal)  
Output: 5.0VDC maximum  
Accuracy: 0.75% FSO  
Resolution: 0.01% FSO  
Supply Current: Less than 75 mA 32VDC excitation

### ENVIRONMENTAL

Temp Operating Range: -65° to 160°F (-55° to 70°C)  
Compensated Range: -65° to 160°F (-55° to 70°C)  
Thermal Effect on Zero:  $\pm 0.01\%$  FSO/°F  
Thermal Effect on Sensitivity:  $\pm 0.01\%$  FSO/°F  
Vibration: 5 to 2000Hz, 10g maximum at one octave/minute sweep rate  
Shock: Peak acceleration of 6g minimum for duration of 11 milliseconds at 1/2 sine wave  
Insulation Resistance: 100 Mohms minimum at 50VDC

### CERTIFICATION

FAA TSO-C124b

### REGULATORY SPECIFICATIONS

ARINC 524A/573/717/747



ARINC 542



ARINC 717

L-3 accelerometers are directly interchangeable with all ARINC compliant tri-axis accelerometers and are certified to the latest TSO C124b

L-3 Aviation Recorders Quality Management System is ISO 9001:2000 and AS9 100:2004 Rev. B Certified

### Aviation Recorders

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**communications**

**Aviation Recorders**

L-3. Headquartered in New York City, L-3 Communications employs over 64,000 people worldwide and is a prime contractor in aircraft modernization and maintenance, C<sup>3</sup>ISR (Command, Control, Communications, Intelligence, Surveillance and Reconnaissance) systems and government services. L-3 is also a leading provider of high technology products, subsystems and systems. The company reported 2007 sales of \$14 billion.

MKT045 Rev \*B This technical data and software is considered as Technology Software Publicly Available (TSPA) as defined in Export Administration Regulations (EAR) Part 734.7-11..