

Aviation Recorders

FA2200/2300 MADRAS

The L-3 Modular Airborne Data Recorder/Acquisition System (MADRAS) is a highly reliable single-LRU which is custom configured for data acquisition as a recording solution for helicopters, business aircraft, unique-mission and military aircraft. The FA2200 records at 256 words per second (wps) for a minimum of 25 hours. The FA2300 has the same data acquisition as the FA2200, but also has the capability to record 4 channels of high quality audio for up to 2 hours.



KEY FEATURES

- Data acquisition and data input/output tailored to each aircraft
- Single-LRU provides flight data acquisition with data recording and optional voice recording
- Up to 2 hours of high quality audio recording (four channels) and a minimum of 25 hours of flight data recording at 256/512 wps
- Field experience MTBF >20,000 hours (dependant upon operation environment)
- Wide range of analog, digital and discrete inputs
- ARINC 747 Flight Data output for connection to a QAR
- Military options
- Control units, microphones, accelerometers and installation accessories are available
- Common ground support equipment with FA2100 CVR and FDR



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PHYSICAL DIMENSIONS

Size:	½ ATR short
Height:	7.6 in (19.30 cm)
Width:	5.0 in (12.70 cm)
Depth:	12.5 in (31.75 cm), 13.1 in including hold down hooks (33.27 cm)
Weight:	15 lbs (6.80 kg)

POWER

Requirements: 28V DC 40W, max

MAIN CONNECTOR

ARINC 404 Quad 106-pin connector

RECORDING

Time:	25 hrs min of flight data storage and 120 min high quality (4 channels) or 30 min high quality (4 channels)
Channels:	4 audio input channels

ENVIRONMENTAL

Temperature:	Operating: -55° to +70°C Non-operating: -55° to +85°C
Altitude:	Operating: -1000 to 55,000 ft
Vibration:	Dependent on application
Penetration:	ED-55/ED-56A: 500 lbs/10ft/ ¼-inch probe
Static Crush:	ED-55/ED-56A: 5000 lbs
Fire Protection:	ED-56A: 50,000 BTU/sq ft/hr for 60 min at 1100°C; 10 hrs at 260°C
Impact	
Shock Wave:	ED-56A: 3400 g, 6.5 ms, half-sine shock wave

UNDERWATER ACOUSTIC BEACON

Beacon, six-year battery and bracket supplied with unit

FA2200 MADRAS DATA ACQUISITION MODULE OPTIONS

Analog
Discrete
Synchro
Frequency
ARINC 429
Custom features available

CERTIFICATION

FAA TSO-C124a, C123a, C124b and C123b

REGULATORY SPECIFICATIONS

ARINC 404A, 747, EUROCAE MOPS ED-56A,
ED-55, ED112, RTCA/D0-160E, RTCA/D0-
178B

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

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100 Cattlemen Road
Sarasota, Florida 34232 U.S.A.
Tel: 941-371-0811 Fax: 941-377-5591
Website: www.L-3ar.com/
Documents: www.L-3ar.net/



communications

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L-3. Headquartered in New York City, L-3 Communications is a prime contractor in aircraft modernization and maintenance, C³ISR (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.

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

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