RM-8000

Strategic/Tactical Airborne Recorder (S/TAR)™

Solid State Recorder / Buffering System

"First Solid State Recorder to Fly on the Global Hawk"

Features

- Non-Volatile Solid State Memory
- Removable Memory Cartridge
- Capacity from 16 to 384 Gbytes
- Parallel I/O: ECL
- Data Rates to 100 Mbytes/sec
- Two Independent Record Channels
- Simultaneous Record/Play
- Event Marking
- Playback to Display or Data Link
- Qualified for Severe Environment
- Sophisticated Built-In-Test
- Comprehensive File Management
- Thermal Cut-Off and Power Interlocks

STAR™
Strategic/Tactical Airborne Recorder

www.L-3Com.com/STAR

Product Description

The S/TAR™ RM-8000 Model is ideally suited for military customers requiring high performance, severe environment storage systems. Specifically designed for use in **Airborne or Ground applications**, the RM-8000 can also been utilized on Surface, SubSurface or Land Vehicles.

- Fast Random Access to Mission Data
- High Data Rates
- Two Independent Record Channels
- Simultaneous Record/Play, Event Marking
- Small, Light Weight, Low Power
- Superior Reliability, Extremely High MTBF
- Low Cost of Ownership, No Preventive Maintenance

The RM-8000 provides a completely open system architecture and utilizes industry standard data and control interfaces and standard VME 6U form factor modules.

Applications

- IMINT Radar, Electronic Warfare Data Collection
- Flight Test & System Evaluation Data Storage

Platforms/Systems

- F/A-18D, F-15, F-16, RF-4
- RQ-4A Global Hawk

SPECIFICATIONS

Strategic / Tactical Airborne Recorder (S/TAR)™
RM-8000

Physical Characteristics

Volume: 0.82 CuFt

Size: 9.6" H x 10.8" W x 13.7" D
244 mm H x 274 mm W x 348 mm D

Weight: 23.0 to 29.7 lbs.*
10.5 to 13.5 kgs*

Power: 75 to 105 watts*

Cooling: Conduction

**Configuration Dependent*

Performance Characteristics

Storage Capacity:	16 to 384 Gbytes
Data Rate-Record:	50 MB/sec
Data-Rate Play:	50 MB/sec
Record Channels:	2
Playback Channels:	1
Event Marking:	Yes
Simultaneous Record/Play:	Yes
Variable Data Rate:	Yes
Erase Time: (EOL):	2.5 Minutes
MTBF (AUF) 32 GB:	>10,000 Hours
Bit-Error Rate:	10^{-12}

Special Features

Memory Partitioning

Options

Power: 28 VDC
Control: RS-422
Modes: Native or Tape Emulation (DCRsi or ID-1)

Environmental Qualifications

	Operating	Non-operating
Temperature	-40°C to +71°C	-57°C to +95°C
Altitude	45,000 ft	80,000 ft
Humidity	up to 100%	0% to100%
Shock	20 G, 11 ms sawtooth	30 G, 18 ms half sine
Vibration (random)	10 Grms, 10 to 2000 Hz	12 Grms, 10 to 2000 Hz

Design Compliance

EMI/EMC:	Mil-Std-461B,C,D,E
Power:	Mil-Std-704A,E
Environmental:	Mil-Std-810E
Random Vibration	Meth 514.4 Proc I
Operating Shock	Meth 516.4 Proc I
Bench Handling	Meth 514.4 Proc V
Low Temperature	Meth 502.3 Proc I&II
High Temperature	Meth 501.3 Proc I&II
Storage Temp	Meth 501.3 Proc I
Extreme Temp	Meth 502.3 Proc I
Temperature Shock	Meth 503.3
Acoustic Noise	Meth 514.4 Proc II
Explosive Atmosphere	Meth 511.3 Proc I
Rain (Drip)	Meth 506.3 Proc II
Humidity (Aggravated)	Meth 507.3 Proc III
Sand & Dust	Meth 510.3 Proc I&II
Salt Spray (Fog)	ASTMG85.A

Capabilities

Modes: Circular Buffer
Control: Ethernet RS-232, 1553B

For Additional Information Contact:

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