

ALL-S/TAR™ DVR (Digital Video Recorder)



Strategic/Tactical Airborne Recorder

Broadcast Quality Video Recording for Airborne Sensors I Selected for US Navy P-8A Poseidon

PRODUCT DESCRIPTION

Specifically developed for Airborne Surveillance missions, the ALL-S/TAR™ DVR (Digital Video Recorder) supports video recording from a range of digital and analog high-definition and standard-definition input formats. High-resolution recording is achieved through low compression ratio MPEG-2 coding and striping data to up to 4 disks concurrently. Video is recorded on 4 HiPERDisk™/HiPERFlash™ Removable Media Modules (HRMM). The DVR's simultaneous record and play, slow/still motion playback and JPEG-2000 export features support airborne image analysis and sharing with off-platform assets. Post mission, the HRMMs are removed from the DVR integrated chassis assembly and processed via a standard SATA (Serial ATA) interface at our companion HRMM Media Management Station (HMMS).

- Recording of eight independent video channels
- Superb image quality, 8-bit 4:2:2 sampling
- Industry Standard Interfaces and Protocols
- Low Cost of Ownership, No Preventive Maintenance



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DVR with HiPERDISK™ / HiPERFLASH™

- Ruggedized Media
- SATA Interface
- 480 GB of Storage
- 8 lbs, 8.6" x 2.5" x 10.5"

FEATURES

- Video Recording
 - High-Definition Video Inputs
 - Component RGB (SOG)
 - Digital SMPTE 292M/274M
 - Standard Definition Video Inputs
 - Composite SMPTE 170M
- Simultaneous Record & Play
 - Records 4 HD and 4 SD Channels
 - Plays 1 HD and 1 SD Channel
- Flexible MPEG-2 Codecs
 - Compression Ratios 5.5:1-50:1
- Synchronized Metadata
- Ethernet SNMP Control
- Removable Media
- 1920GB of Storage
- Time Stamping of Video
- Event Marking (Record/Play)
- NSA 9-12 Secure Erase (HiPERFlash™)

- Hot Swappable Media
- Slow Motion and Still Scan Play
- Export Selected Individual Video Frames (JPEG-2000 via Ethernet)

APPLICATIONS

- High-Resolution Sensor & Weapons Video Recorder
- Surveillance
- Search & Rescue
- Drug Interdiction
- Commercial Security Systems

PLATFORMS/SYSTEMS

- Fixed Wing
- Rotary
- Surface/Subsurface Vessels

ALL-S/TAR™ DVR (Digital Video Recorder)



PHYSICAL CHARACTERISTICS

Volume: 2.3 CuFt (3990 in³)
Size: 10.5" H x 19" W x 20" D
267 mm H x 483 mm W x 508 mm D
Weight: 108 lbs;
49.1 kgs (with removable media)
Power: 115VAC; 47-400 Hz, 1 Ph 435 watts
Cooling: Forced Air Convection (External)

PERFORMANCE CHARACTERISTICS

- Storage Capacity: 1920 Gbytes
- Input Channels:
 - RGB (SOG) Component Expandable to 5 (2 typ)
 - EIA-170 Composite Expandable to 20 (4 typ)
 - SMPTE 292 (digital HD) Expandable to 5 (2 typ)
- Output Channels:
 - RGB (SOG) Component Expandable to 5 (1 typ)
 - EIA-170 Composite Expandable to 5 (1 typ)
- Total number of mixed input/output channels is design configuration constrained
- Control: SNMP,
Gigabit Ethernet
- Time Reference: IRIG-B
- Image Distribution: JPEG-2000 via Ethernet
- Time Stamping/Search: Yes
- Simultaneous Record/Play: Yes
- MTBF (at 35°C): 3,500 hrs

SPECIAL FEATURES

- Multiple Frame Rates:
23.98, 24, 25, 29.97,
30, 50, 59.94, 60, 60.6
- Frame Sizes:
up to 1920 x 1080p
(custom sizes
permitted)
- MPEG2 stream rates:
up to 140 Mbits/sec
- Chroma format:
4:2:2
- Group of Pictures (MPEG2):
1(all I-frame) up to 63
- Video Frame Format:
Progressive, Interlaced

ACCESSORIES

- HRMM Media Management Station (HMMS)
- Mounting Slides

ENVIRONMENTAL QUALIFICATIONS

	Operating	Non-operating
Temperature	5°C to +35°C	-40°C to +70°C
Altitude (max)	11,000 ft	40,000 ft
Humidity (non-condensing)	6% to 95%	6% to 95%
Shock (half-sine)	10 G, 11 ms	10 G, 11 ms
Vibration (random)	0.9 Grms, 10 to 2000 Hz	2.1 Grms, 10 to 2000 Hz

DESIGN COMPLIANCE

- EMI/EMC: MIL-STD-461E
- Power: MIL-STD-704E
- Environmental: MIL-STD-810F
 - Altitude Meth 500.4 Proc III
 - Rapid Decompression Meth 500.4 Proc III
 - Random Vibration Meth 514.5 Proc I
 - Acceleration Meth 513.5 Proc II
 - Crash Safety Meth 513.5 Proc III
 - Shock Meth 516.5 Proc I
 - Bench Handling Meth 516.5 Proc VI
 - Temperature Meth 501.4 Proc I & II
 - Temperature Shock Meth 503.4 Proc I
 - Explosive Atmosphere Meth 511.4 Proc I
 - Humidity Meth 507.4 Proc I
 - Fungus Fungus Inert Material
 - Decontamination No Damage

OPTIONS

- Multiple IO Channels Mix: Consult factory
- MPEG-2 Compression: Tailored to sensor video
- Media: Rotating Disk/Flash Disk

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