

Rugged Data System-Network File Server, Video Server, Data Recorder

Product Description

Tailored for constrained environments like PODS and smaller platforms with strict Size, Weight and Power (SWaP) constraints, the TuffLITE® is a compact, multi-functional device. Expertly balancing recording, data aggregation, and processing with robust cybersecurity measures, it handles multiple data sources and offers selective partition control with in-flight data erasure. The TuffLITE efficiently meets the stringent demands of compact platforms, making it an optimal choice for secure and efficient data management.



Encryption Options

- FIPS 197/AES256: Available for Data-At-Rest and Data-In-Transit
- FIPS-140: Available for Data-At-Rest
- Commercial Solutions for Classified (CSfC): Available for Data-At-Rest and Data-In-Transit

Features

- **High-Speed I/O: Equipped With 10GbE Interface**
- **Over 8TB (Detachable)**
- **Capable Of Ingest, Pass Through, And Reproduction Video**
- **Specifically Crafted To Meet The Stringent Size, Weight, And Power (SWaP) Requirements Of Compact**

Ampex Common Compute Environment (ACCE)

ACCE is a comprehensive software suite designed for data acquisition, management, and storage. It provides a unified interface and supports various hardware devices, simplifying data and device management while ensuring data integrity.

- Software-defined recording for capturing diverse data types
- Facilitation of third-party software integration
- Accurate timestamping and synchronization with external time sources
- File indexing for efficient data retrieval and analysis
- Comprehensive device management capabilities

Data Types

Ampex offers an open architecture platform designed to address the unique data storage and management challenges faced by the defense industry, particularly the Department of Defense (DoD) weapon system portfolios. Its adaptability enables seamless integration of new input/output configurations, ensuring effective management and storage of any data type required.

- Support for diverse critical data types such as EO/IR, EW/ISR, Mission Data, Flight Test, Bus Data, and Prognostic and Health data
- Open architecture platform designed to handle unique defense industry data storage and management challenges
- Seamless integration of new input/output configurations for effective data management and storage
- Commitment to innovation and continuous improvement to address emerging challenges

System

Specifications ^{1&2}

| | |
|---------------------|--|
| CPU: | Intel Atom X Series 'Elkhart Lake' |
| Network Interfaces: | 10GbE, 1GbE, 2.5GbE, Video, and RS-422 |
| Detachable Storage: | Custom Configurations handling up to 8TB |
| Network Protocols: | NFSv4, NFSv3, CIFS/SMB, FTP, TCP, UDP, SSH |
| Operating System: | Red Hat Enterprise Linux (RHEL) plus ACCE Framework |
| Encryption: | FIPS-140, AES 256/FIPS 197, and Commercial Solutions for Classified (CSfC) |

Performance

| | |
|---------------------|----------|
| Internal Data Rate: | 1250MB/s |
| NFS Data Rate: | 1100MB/s |

Power

| | |
|--------------|-------|
| Power Input: | 28VDC |
| Dissipation: | 35W |

Mechanical

| | |
|------------------|----------------------------|
| Dimensions: | 1.28"H x 6.12" W x 6.69" D |
| Weight (System): | 2.5lbs |

Environmental

| | |
|--------------------|--|
| Temperature: | -40°C to +70°C Operational |
| Humidity: | 0% to 95% RH |
| Vibration: | 4.6grms (active) / 9.8grms (endurance) |
| Shock: | 20g (halfsine, 11ms) |
| EMI Compatibility: | MIL-STD-461 |

¹ Specifications subject to change without notice

² Contact Ampex for availability of options

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