

Rugged Data System-Network File Server, Mission Computer, Data Recorder

Product Description

Rugged data recorder and network file server designed for long-duration ISR missions that require sustained, uninterrupted capture. An Intel Xeon D-1746TER "Ice Lake" engine drives 5 GB/s sustained write to 72+ TB of removable SSD storage. AES-256, FIPS-140, NIAP-certified, and CSfC encryption secure data at rest and in transit. Four 1 GbE and two 10 GbE interfaces deliver capture and distribution, with custom I/O available. Sealed, fan-cooled chassis holds full performance from -40°C to +50°C and meets MIL-STD-461G.



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

- **Intel Xeon D-1746TER "Ice Lake" Processor**
- **Two 10GbE and Four 1GbE, Custom I/O Available**
- **72TB+ Removable SSD Storage At 5 GB/s Sustained**
- **AES-256, FIPS-140, NIAP, And CSfC Encryption**
- **NFS File Server On RHEL With ACCE Framework**
- **Fan-Cooled Chassis, -40°C To +50°C Operation**

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 a wide range of 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 those of the advanced weapon systems portfolios under development for the warfighter. Its adaptability enables seamless integration of new input/output configurations, ensuring effective management and storage of any required data type.

- Support for diverse critical data types such as 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

Specifications ¹ Systems

CPU Subsystems: Intel Xeon D-1746TER "Ice Lake"
Network Interfaces: Four 1 Gigabit Ethernet and Two 10 Gigabit Ethernet (Custom I/O available)
Removable Storage: Up to 72TB+
Network Protocols: NFSv4, NFSv3, FTP, SFTP, TFTP, DHCP, UDP, TCP, SSH, PXE
Operating System: Red Hat Enterprise Linux (RHEL) plus ACCE Framework
Encryption: AES 256/FIPS 197, FIPS-140, NIAP Certificate, and CSfC

Performance

Internal Data Rate: 5,000 MBytes/s (sustained)
NFS Data Rate: 4,000 MBytes/s (network traffic dependent)

Power

Power Input: Power Input: 28VDC
Dissipation: 250W

Mechanical

Dimensions: 8.28" W x 10.03" H x 18.40" D
Weight (System): 37.2 lbs

Environmental

Temperature: 40°C to +50°C (with internal cooling fans)
Humidity: 0% to 95% non-condensing
Vibration: 3.52grms (functional) / 1.96grms (endurance)
Shock: 10g, 11ms
EMI Compatibility: MIL-STD-461G

¹Specifications subject to change without notice

²Contact Ampex for availability of options

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