

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

Product Description

The TuffCORD is a versatile solution that serves as a multi-functional device, offering capabilities as a recorder, file server, and data loader in users harsh edge applications. Its compact size, lightweight design, and low power consumption make it easily deployable. With a strong emphasis on information assurance, it incorporates robust cybersecurity features. The TuffCORD provides seamless connectivity with multiple interface options, and a high-capacity removable memory module.



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

- **Removable Storage Capacity up to 20TB**
- **Standard Dual 1GbE Interfaces**
- **Greater than 250MB/s sustained network throughput**
- **Expandability and Flexibility: Customizable I/O options**
- **Built Rugged, MIL-STD-810 with MIL-STD Connectors**

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 E3800 Series
Network Interfaces:	Two 1 Gigabit Ethernet
Removable Storage:	Custom Configurations handling up to 20TB
Network Protocols:	NFSv4, NFSv3, CIFS/SMB, FTP, TCP, UDP
Operating System:	Red Hat Enterprise Linux (RHEL) plus ACCE Framework
Encryption:	AES 256/FIPS 197, FIPS-140, and Commercial Solutions for Classified (CSfC)

Performance

Internal Data Rate:	250 MB/s (sustained, unencrypted), 150 MB/s (sustained, with encryption)
NFS Data Rate:	100 MB/s sustained (read or write with encryption)

Power

Power Input:	28VDC
Dissipation:	15W

Mechanical

Dimensions:	3.6" H x 4.8" W x 6.3" D
Weight (System):	5.5lbs

Environmental

Temperature:	-40°C to +55°C (Panel Mount) -40°C to +71°C (Base Mount on Conduction Cooled Surface)
Humidity:	0% to 95% RH
Vibration:	4.6grms (active) / 9.8grms (endurance)
Shock:	20g (half sine, 11ms)
EMI Compatibility:	MIL-STD-461

¹ Specifications subject to change without notice

² Contact Ampex for availability of options