

Low Cost Rugged Data System-Network File Server, Network Attached Storage, Data Recorder

Product Description

Meet the Common Architecture Recorder (CAR), a scalable, rugged network attached storage (NAS) and compute device, transforming data acquisition and recording from a capital expense to an operating cost. The CAR is a compact, lightweight, and power-efficient, data recorder that fits into attritable ground vehicles and aerospace systems, even in tight spaces. Its economic cost and small size are only matched by its robust performance. Additionally, it uses a USB Type-C interface for direct downloading.



Encryption

- [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

- **“All-in-one” Processor & Storage with Fixed or Removable Storage Media**
- **2 TB fixed storage or 512GB removable storage**
- **Modular Linux Based Open Architecture**
- **USB ‘Type-C’ Connectivity**
- **Standard: 2x 1GbE**
- **GNSS/GPS Receiver (w/ disable feature)**

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 E3805
Network Interfaces:	Two 1 Gigabit Ethernet
Fixed Storage:	250GB, 500GB, 1TB, 2TB
Network Protocols:	NFSv4, NFSv3, CIFS/SMB, FTP, TCP/IP, UDP/IP, PCAP, Others
Operating System:	Linux OS plus ACCE Framework
Encryption:	Self Encrypting Drive

Performance

Internal Data Rate:	250 MB/s
NFS Data Rate:	200 MB/s

Power

Power Input:	Wide Range DC 16-36V
Dissipation:	9W

Mechanical

Dimensions:	1.8" H x 4.8" W x 6.8" D
Weight (System):	2lbs

Environmental

Temperature:	0°C to +55°C
Humidity:	0% to 95% RH
Vibration:	4grms
Shock:	9g (Sawtooth, 11ms)
EMI Compatibility:	MIL-STD-461

¹ Specifications subject to change without notice

² Contact Ampex for availability of options