

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

### Product Description

The TuffServ 640v2 (TS 640v2) empowers you to capture and record your fastest-moving data at the edge. Designed for high-performance applications, such as intensive EW/ISR and EO/IR applications. Its robust capabilities enable you to effectively capture and store critical information while having the CPU processing power needed to run your Linux-based AI/ML data analysis software, providing valuable insights for analysis and decision-making in near real-time.



### 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 300TB**
- **Quad 10GbE Optical Interfaces**
- **Suitable For Edge-Operating AI/ML Applications; Tested And Validated.**
- **Expandability And Flexibility: Customizable I/O Options**
- **Can Record IRIG 106 Chapter 10 data format**

### 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 <sup>1 & 2</sup>

CPU:	Intel Core i7
Network Interfaces:	4 x 10GbE and a 1 GbE
Removable Storage:	Up to 300TB (custom configurations available)
Network Protocols:	NFS, CIFS/SMB, PCAP, FTP, TCP, UDP, IP, PTP (1588), PCAPnG, IRIG 106 Chapter 10
Operating System:	Red Hat Enterprise Linux (RHEL) plus ACCE Framework
Encryption:	AES 256/FIPS 197, FIPS-140, and Commercial Solutions for Classified (CSfC)

### Performance

NFS Data Rate:	~2 GB/s to 2.5 GB/s (Depending on Configuration)
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### Power

Power Input:	28VDC
Dissipation:	125 W

### Mechanical

Dimensions:	7.63" H x 4.88" W x 12.63" D
Weight (System):	30lbs (varies depending on RSA configuration)

### Environmental

Temperature:	-40° C to +60° C (Vertical Mount on Conduction Cooled Surface) -40° C to +71° C (Horizontal Mount on Conduction Cooled Surface)
Humidity:	0% to 95% RH
Vibration:	10 grms
Shock:	20 g, half sine, 11ms
EMI Compatibility:	MIL-STD-461F

<sup>1</sup>Specifications subject to change without notice

<sup>2</sup> Contact Ampex for availability of options

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