

# **HS-DTS**

# High Speed Data Transfer System

## Handling your increasing data requirements

GE Aviation has over 30 years experience in the design, integration and manufacture of data transfer and storage systems that are fielded on a multitude of platforms across the globe including the F-16, F-22, UH-60, F/A-18, AH-64 and F-35. GE is committed to providing the most reliable and innovative equipment on the market.

GE Aviation's High-Speed Data Transfer System (HSDTS) is designed to operate as either a Network-Attached Storage (NAS), or Storage Area Networking (SAN) device to handle the high volume of data processing requirements for both manned and unmanned airborne platforms. It offers unparalleled system read/write throughput speeds by providing up to eight scalable Ethernet ports, while also being able to host 3rd party applications such as Digital Moving Maps (DMM), and Automated Ground Collision Avoidance System (AGCAS).

Scalable storage is provided through up to two ruggedized removable memory cartridges, which are the latest Commercial Off-the-Shelf (COTS) nonvolatile memory express (NVMe) Solid State Drives (SSDs). The GE HSDTS is a scalable solution that offers up to 64TBytes of encrypted DAR storage. In addition, the HSDTS offers industry leading I/O flexibility through Ethernet switching, link aggregation and the support of multiple storage protocols such as NFS, iSCSI, RDMA, and NVMe-oF. This high capacity, compact data transfer system provides customers a single solution that is highly configurable for a variety of applications.

Recognizing the need for Information Assurance (IA) and encrypted Data-at-Rest (DAR), GE Aviation developed the HSDTS to undergo FIPS 140-3 validation and certification by incorporating AES-256 self-encrypting drives, along with secure boot, and Anti-Tamper provisions. Additional security features can be added to provide a path to Commercial Solutions for Classified Programs (CSfC) or NSA Type 1 Top Secret and Below Information (TSABI) security in both attended and unattended operations.





### **Specifications**

#### Overview

High-speed / high capacity, mass storage solution for all UAS, ISR, mass sensor, and video operations

App hosting and data processing

>2 GBytes/s read/write throughput

AES-XTS mode encryption for data-at-rest

#### **Interfaces**

80 Gbps interfaces via 2  $\times$  40 Gbps or 8 x (1 or 10 Gbps) Ethernet data transfer links

- Remote Direct Memory Access (RDMA)
- Network File System (NFS) / iSCSI
- TCP / IP
- UDP
- Link Aggregation Control Protocol IEEE 802.ad (LACP)

Gigabit Ethernet console / key fill port

- Simple Network Management Protocol (SNMP) v3
- SSH
- Internet Key Exchange Version 2 (IKEv2)

RS-232 factory debug port

#### Removable cartridges

- Up to 32 TBytes each for a total of 64TB storage
- NVMe SSDs



#### Security

Certified for FIPS 140-3

Zeroize discrete and button

Advanced Encryption Standard (AES)-256 DAR

Trusted Platform

- Secure boot
- Trusted boot

#### **SWaP**

115VAC / 28 VDC <100W

5.1" W x 9.5" L x 7.5" H

<13 pounds



