High-Speed Data Transfer System (HSDTS) offers next generation performance in a highly flexible, modular design that can be tailored for any application.

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 military platforms across the globe including the F-16, F-22, 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) has been designed to handle the high volume of digital data on current and future airborne platforms, both manned and unmanned. It offers unparalleled data read/write speeds, the capability to host user developed applications and process data from its mass storage, interchangeable NVMe storage media, and user interchangeable capacity based on Commercial Off The Shelf (COTS) Solid State Drives (SSD). In addition, the HSDTS offers considerable I/O flexibility depending on user application. This high capacity, low SWaP data transfer system provides GE Aviation customers a single solution that is highly configurable for a variety of applications.

Recognizing the need for Cybersecurity of Data-at-Rest, GE Aviation developed the HSDTS to support Commercial Solutions for Classified (CSfC) dual-layer encryption, as well as being certifiable to FIPS 140-2, Level 3 or NSA Type 1 Top Secret and Below Information (TSABI) in both attended and unattended operations depending on customer application.

GE offers the HSDTS in both a small-form factor and high capacity variant. The high capacity variant can store up to 12TB of data on 3 removable data cartridges (RDC), while the small form factor variant is better suited for customers looking to store <4TB of data via a single RDC where the lowest possible SWaP is paramount.

HSDTS is currently at Technology Readiness Level 5 and is available for demonstration upon request.
HSDTS Specifications

- High speed, mass storage
- Unique solution for all UAS, ISR, mass sensor/video operations
- Standard 10 GbE interface x2
- Adaptable to any A/C interface
- App Hosting and Data Processing
- >900 MB/Sec R/W with NVMe RDC
- NSA Cryptographic Modernization Program Compliant Single-chip solution for Data-at-Rest
- Certifiable for NSA Type 1 TSABI (attended or unattended ops) or FIPS 140-2, Level 3
- Supports CSfC dual layer encryption
- EKMS-308 Compliant DS-101 Keyfill
- Capable of key load management service for all A/C crypto equipment

- **Small Form SWaP**
  - 28 VDC or 115 VAC 400 Hz
    - <20 W
    - 5.0” x 2.25” x 8.0” W x H x D
    - < 6 pounds

- **High Capacity SWaP**
  - 28 VDC <40 W
  - 5.0” x 4.5” x 8.0” W x H x D
  - < 10 pounds