



GE Aviation's Enhanced Data Transfer Cartridge (EDTC)

GE Aviation has over 40 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 Enhanced Data Transfer Cartridge is a flight proven, high-assurance Line Replaceable Unit (LRU) currently deployed on one of the world's most advanced tactical fighter. The AMS is comprised of two subsystems: a cockpit mounted Enhanced Data Receptacle (EDTR) and removable Enhanced Data Transfer Cartridge (EDTC). The primary function of the AMS is to provide mass storage and file server functionality for the aircraft avionics subsystems. It is also the primary repository for avionics operational flight programs (OFP), mission and theater data, prognostics and health data, as well as aircraft parametric data.

The EDTC offers the industry's most reliable storage through Single-Level Cell Error Detection and Correction (EDAC) memory, which is expandable up to 240 (GBytes), and provides file server services between the internal mass storage and the off-board mission planning ground station via a gigabit Ethernet interface located behind the EDTC front panel. This interface is compatible with the Gigabit Ethernet Module (GEM), which is provided as part of the ground support adapter kit

Recognizing the need to be able to reliably operate in harsh environments, the EDTC has been qualified to MIL-STD-810, MIL-STD-461, MIL-STD-740, and designed to perform over an extended temperature through convection. The EDTC implements internal Built-In-Test (BIT) to autonomously detect and report a minimum of 98% of all functional failures providing complete autonomous end-to-end system checks, fault detection (FD), fault isolation (FI), and performance monitoring of the equipment.



AMS

- App Hosting and Data Processing
- VxWorks Operating System
- Field Upgradeable
- 96GBytes EDAC memory (expandable to 240GBytes)
- Protocols Supported
 - PCI
 - Gigabit Ethernet
- MTBF: > 7,702 hours (predicted)
- MTTR: < 12 minutes
- Built-In-Test (BIT):
 - Power-On Self-Test (POST)
 - Initiated (IBIT)
 - Continuous (CBIT)
- Environments:
 - -54°C to 85°C Storage
 - -40°C to 65°C Operating
- Aircraft Memory System SWaP:
 - 5 VDC <10 W Typical
 - < 5.0 pounds
 - Cartridge (EDTC)
 - 4.72"(W) x 1.62"(H) x 7.50"(D)

Data Transfer Systems
Andrew Massiah
andrew.massiah@ge.com

GE Aviation
3925 Gateway Centre Blvd.
Suite 100
Pinellas Park, FL 33782