**Overview**

The In-Line Fault Module (IFM) is a MIL-STD-1760E Class I breakout box fully compatible with the latest “E” version of this aircraft-store interface standard. The IFM allows users to monitor and insert electrical-fault conditions (i.e., open and short circuit) in-line between an aircraft platform and various MIL-STD-1760 stores, intermediate carriage devices, and store simulators under test.

The IFM has front-panel switches for controlling the state of signal interfaces (e.g., three-phase 115 VAC, DC1, DC2, Release Consent, Interlock, Address, and MIL-STD-1553 signal interfaces). Front panel indicators are provided for monitoring the on/off states of 115 VAC, DC1, DC2, and RC power. Test points are provided for monitoring all power and discrete interfaces as well as the MIL-STD-1553 Bus A and B and Low Bandwidth lines.

The MIL-STD-1760E IFM now supports the Up and Down Fibre Channel signals, the 270 VDC power line and the High bandwidth lines 1 and 3.

**Features**

- MIL-STD-1760E Test Support Equipment
- Used in-line between aircraft platforms and stores or intermediate carriage systems
- Switches for controlling state of signal interfaces
- Indicators for monitoring 115 VAC, 28 VDC DC1/DC2, and 270 VDC power
- Test points for monitoring power and discrete interfaces
- Twin-Axial connectors for monitoring or injecting 1553 Bus A/Bus B data
- Monitoring or pass-through of Up Fibre-Channel and Down Fibre-Channel signals
- Monitoring or pass-through of High Bandwidth 1 and 3 signals
- Monitoring or pass-through of Low Bandwidth signals
- Umbilical cable interface to unit under test
SPECIFICATIONS

Switches

- 115 VAC Phase A/B/C, Open/Normal
- 270 VDC, Open/Normal
- 28 V DC1, DC2, Open/Normal
- Release Consent, Open/Normal
- Interlock, Short/Open/Normal
- Interlock Return, Open/Normal
- Address Bits 0-4, Parity, Return, Short/Open/Normal
- 1553 Bus A/B, Short/Open/Normal
- UFC/DFC, Open/Normal
- HB1, HB3, Open/Normal
- Low Bandwidth, Open/Normal

Test Points

- 115 VAC Phase A/B/C and Neutral
- 28V DC1, DC1-Return, DC2, DC2 Return
- Release Consent
- Interlock, Interlock Return
- Address Bits 0, 1, 2, 3, 4, Parity, Return
- Structure Ground
- Twin-Axial connectors for 1553 Bus A/B
- Up/Down Fibre-Channel
- High Bandwidth 1 & 3
- Low Bandwidth

Indicators

- 115 VAC Phase A/B/C
- DC1, DC2
- Release Consent

Interface Characteristics

- MIL-STD-1760E plug-to-jack arrangement (standard)
- D38999/26WJ20PN plug on 5 ft (standard) umbilical cable
- D38999/20WJ20SN jack on breakout box
- Custom cable-length builds available

Dimensions

- 12” x 9” x 3.5” (L x W x H) excluding umbilical cabling and connectors

Weight

- 7.5 pounds