The MIL-STD-1553 Fibre Optic Databus Extender is an optical-electrical bridge for extending a MIL-STD-1553 databus to over one mile in length. The MIL-STD-1553 Fibre Optic Databus Extender provides a low-latency mechanism for sending 1553 data through noisy environments and across long distances. The MIL-STD-1553 Fibre Optic Databus Extender is a bi-directional optical extension. Two identical units are required at each end of the optical link for bi-directional operation.

The MIL-STD-1553 Fibre Optic Databus Extender can be configured to extend one (1) or two (2) dual redundant MIL-STD-1553 databases. Two or four twinax connectors allow easy connection to the MIL-STD-1553 primary and secondary channels. Each 1553 bus interface is selectable as transformer or direct coupling. One duplex-LC connector (with GbE SFP) is used for connection to the fibre optic link. Multi-mode, or single mode fibre may be used.

The MIL-STD-1553 Fibre Optic Databus Extender is ideal for applications where test equipment is separated from Units Under Test. These applications include flight line testing, anechoic chambers, and large simulation systems.

### MIL-STD-1553 Fibre Optic Extender

**Single or Dual MIL-STD-1553 Configurations**
- Configurable as Transformer or Direct Coupling
- Two twinax connectors for single 1553 configuration
- Four twinax connectors for dual 1553 configuration

**Fibre Optics**
- One dual LC-connector packaging & LSAP distribution
- Multi-mode or Single-mode Fibre connections

**Functionality**
- Low latency of 2 usec through the extender
- 1.0625 Gbps transmission rates over fibre
- No software to configure, simple operation

**Form Factor**
- Small form factor: 51 x 114 x 105 mm
- Weight: < 1 pound
- Power: Standard 120V ac, or 7-15V dc
- Operating temp: 0º...+45º C ambient
- Storage temp: -40º...+85º C
- Humidity: 0...95%

**Ordering Information**

**FO-1553-1**
- Single Channel MIL-STD-1553 Fibre Optic Databus Extender
- One dual redundant MIL-STD-1553

**FO-1553-2**
- Dual Channel MIL-STD-1553 Fibre Optic Databus Extender
- Two dual redundant MIL-STD-1553