



MIL-STD-1553 Fibre Optic Databus Extender

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 databuses. Two or four twinax connectors allow easy connection to the MIL-STD-1553 primary and secondary channels. Each 1553 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.



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Single or Dual MIL-STD-1553 Configurations

The PDL Administrator software component of the PDL-Manager system is used by a Load Administrator to create packages of LSAPs for the remote PDLs. In addition to packaging the LSAPs the PDL-Manager also allows the load administrator to define the hierarchy and navigation tree that the PDL users see on the actual PDLs when executing data load operations. The LSAP packages created with the PDL-Manager application are stored on a networked file server to be accessed by the PDLs and the PDL- Updater applications.

- Allows centralized Load Administrator to manage LSAP packaging & LSAP distribution
- 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: 0°...+45° C ambient
- Storage temp: -40°...+85° 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

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