

FTDR110DB Series

Optical Redundant 8-bit Digital 1-ch Video with 1-ch Bi-directional Data



Description

The FTDR110DB 8-Bit Digital Video and Data Modules, features high-performance laser-based optics for the clearest, most reliable data transmission over one fiber for both single and multi-mode with no video degradation over the entire operating distance (up to 20km), as well as RS-232/422/485 serial data ports. The dual fiber optical redundancy design provide safe operation in the case of loss of either one fiber.

This plug-and-play product provides instant product compatibility for most major security manufacturers' equipment and reliability in harsh environments, a perfect compliment to any commercial, government or intelligent transportation application. The product operates in FT-C18 rack mount chassis.



Features

Video

- ▶ NTSC or PAL video standards supported
- ▶ Non-compressed 8-bit digitally encoded video
- ▶ No video degradation over the maximum operating distance

Data

- ▶ Meets EIA RS-232/422/485 specifications
- ▶ Full RS-485 Tri-state support
- ▶ Half or full-duplex operation
- ▶ Transparent to data encoding
- ▶ Data rates from 0 to 256kbps

Optical

- ▶ Optical Redundant Dual fiber design
- ▶ High performance laser-based optics
- ▶ Multimode or Singlemode
- ▶ ST connector available

Robust Design

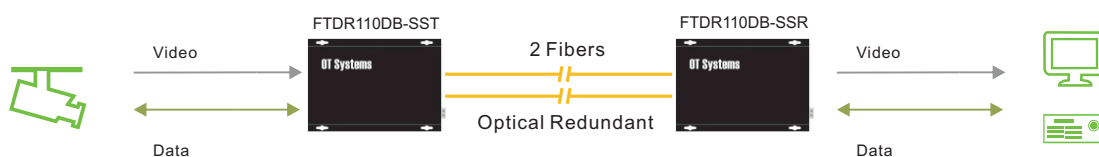
- ▶ Plug-and-Play design, no in-field adjustments required.
- ▶ Hot-swappable design
- ▶ Wide operating temperature range of -40°C to +75°C
- ▶ Designed for use in harsh environments

Warranty

- ▶ Comprehensive Lifetime Warranty

Video Transmission

Typical Application



Specifications

Video

Number of Channels	1
Format	NTSC/PAL/SECAM
Input/Output	1 Volt pk-pk (75 ohms)
Bandwidth	>=6MHz
Differential Gain	<1% Typical
Differential Phase	<1 Degree Typical
SNR-CCIR weighted	>60dB

Data

Number of Channels	1
Data Direction	Bi-directional
Data Interface	RS232, RS422, RS485 2 or 4-wire Tri-state
Selection Method	DIP switch-selectable
Data Rate	0~256kbps
Data Format	MPD (Manchester, Bi-phase, etc)

LED

Video Signal Indication (Presence)	Green LED lit
Data In / Out	Red/Green LED lit
Optical Carrier Detected	Yellow / Active
Power	Red / On

Connectors

Video Input / Output	BNC
Optical Input / Output	2 x ST
Data Input / Output	7-pin screw terminal
Power (Rack-Mount)	Bus connector

Electrical and Mechanical

Power	From FT-C18 Chassis
Dimensions(WxHxD)	148 x 20.4 x 213mm(Max)
Shipping Weight	0.16kg

Environmental

Operating Temp	-40°C to +75°C
Storage Temp	-40°C to +85°C
Relative Humidity	0 to 95% non-condensing
MTBF	> 100,000 hours

Ordering Information

Fiber Type	Part Number	Description	Wavelengths (nm)	Optical Power Budget (dB)	Max. Distance (Km)	No. of slots
Single-mode (9/125μm)	FTDR110DB-SST	1 - ch Video Transmitter with 1-ch bidirectional Data Transceiver with Optical Redundancy	1310 1550	17	20	TBC
	FTDR110DB-SSR	1 - ch Video Receiver with 1-ch bidirectional Data Transceiver with Optical Redundancy				

Option	<ul style="list-style-type: none"> For Standalone type, please add "SA". E.G. FTDR110DB-SSTSA
Rack Mount Chassis	<ul style="list-style-type: none"> FT-C18 is to be purchased separately. Please refer to accessories section for the details.
Power Adapter	<ul style="list-style-type: none"> Power adapter is included for Standalone type only.

- Notes:
- Transmission distance will suffer if additional losses are introduced by the optical connectors, fusions, splices and the fibers within the network.
 - Operating distance of multimode is limited by the characteristics of the fiber bandwidth.
 - Please feel free to consult factory for any special requirement and customization.



OT Systems Ltd., October 2013

Due to continuous improvement, all product specifications are subject to change without further notice.