

# FTD110DB-XXR3

3 Independent Optical Channels 8-bit Digital Video Receiver with Bi-directional Data Transceiver



## Description

The 8-Bit Digital Video and Data Modules series FTD110DB-XXR3, the 3-channel video fiber receiver and data transceiver, features high-performance laser-based optics for the clearest, most reliable data transmission. The FTD110DB-XXR3 supports 3 independent channels of 8-bit PCM digital video with bi-directional data in 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.

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 features in card module or standalone type.

These units are compatible with the FTD110DBMicro and FTD110DB transmitters.



## Features

### Video

- ▶ NTSC or PAL video standards supported
- ▶ Non-compressed 8-bit digitally encoded video
- ▶ 3 independent channel receiver in one module
- ▶ 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

- ▶ Three independent fiber inputs
- ▶ High performance laser-based optics
- ▶ Multimode or Singlemode
- ▶ ST or FC connectors available

### Robust Design

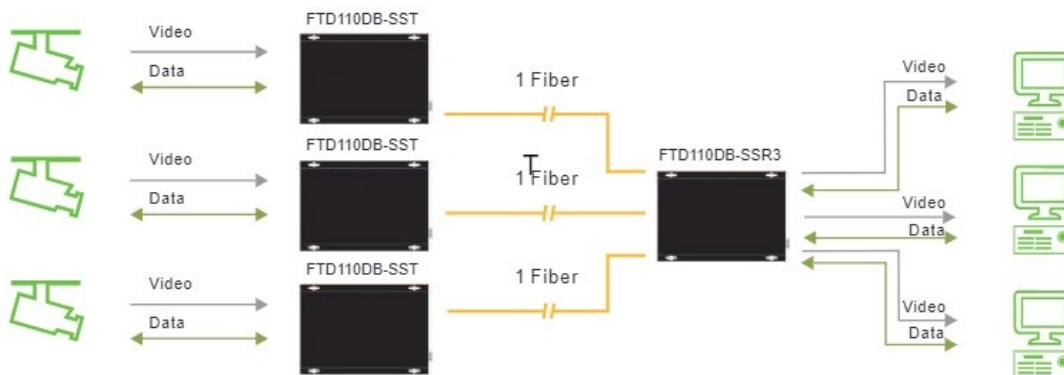
- ▶ Plug-and-Play design, no in-field adjustments required.
- ▶ Hot-swappable design
- ▶ Wide operating temperature range of -40°C to +75°C
- ▶ Designed for use in harsh environments

### Warranty

- ▶ Comprehensive Lifetime Warranty

Video Transmission

## Typical Application



## Specifications

### Video

Number of Channels	3 (from independent Transmitters)
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	3
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 Output	BNC
Optical Input / Output	ST (standard), FC (optional)
Data Input / Output	7-pin screw terminal
Power (Standalone)	2-pin screw terminal
Power (Rack-Mount)	Bus connector

### Electrical and Mechanical

Power (Standalone)	12VDC @ 8.4W
Power (Rack Mount)	From FT-C18 Chassis
Dimensions(WxHxD) (Standalone)	156 x 50.5 x 223mm(Max)
Dimensions(WxHxD) (Rack Mount)	148 x 41.4 x 213mm(Max)
Shipping Weight (Standalone)	0.9kg
Shipping Weight (Rack Mount)	0.4kg

### 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

Video Transmission

## Ordering Information

Fiber Type	Part Number	Description	Wavelengths (nm)	Optical Power Budget (dB)	Max. Distance (Km)	No. of slots
Multi-mode (62.5/125µm)	FTD110DB-SMR3	3 Independent Optical Channels 8-Bit Digital Video Receiver with Bi-directional Data Transceiver	1310   1550	23	1	2
Single-mode (9/125µm)	FTD110DB-SSR3	3 Independent Optical Channels 8-Bit Digital Video Receiver with Bi-directional Data Transceiver	1310   1550	17	20	2

Options	<ul style="list-style-type: none"> <li>ST type connector is standard. For FC type, specify "F" in the suffix. E.g. FMR3.</li> <li>For Standalone type, please add "SA". E.g. SMR3SA</li> <li>Please feel free to consult factory if longer transmission distance is required.</li> </ul>
Power Adaptor	<ul style="list-style-type: none"> <li>Power adaptor is included for Standalone type only.</li> </ul>
Rack Mount Chassis	<ul style="list-style-type: none"> <li>FT-C18 is to be purchased separately. Please refer to accessories section for the details.</li> </ul>

- 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.
  - Power adaptor is manufactured by third party and is supplied with fitted screw - terminal output cables.
  - Please feel free to consult factory for any special requirement and customization.

