

# FTD110DB

Card Module 8-bit Digital 1-ch Video with 1-ch Bi-directional Data



## 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

- ▶ One fiber design
- ▶ 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

## Description

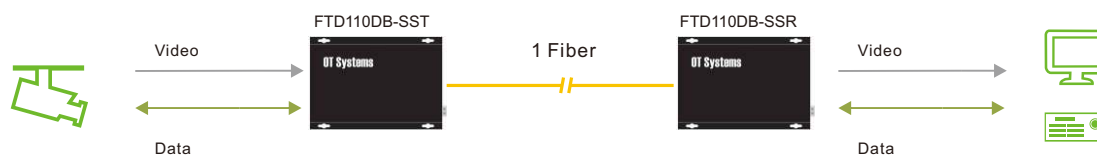
The FTD110DB 8-Bit Digital Video and Data Modules, features high-performance laser-based optics for the clearest, most reliable data transmission over one fiber for both single and multi-mode with no video degradation over the entire operating distance (up to 20km), as well as RS-232/422/485 serial data ports.

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.

These units are compatible with the FTD110DBMicro transmitters/receivers and FTD110DB-XXR3 receivers.

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	ST (standard), FC (optional)
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
Multi-mode (62.5/125µm)	<b>FTD110DB-SMT</b>	1 - ch Video Transmitter with 1-ch bidirectional Data Transceiver	1310   1550	23	4	1
	<b>FTD110DB-SMR</b>	1 - ch Video Receiver with 1-ch bidirectional Data Transceiver				
Single-mode (9/125µm)	<b>FTD110DB-SST</b>	1 - ch Video Transmitter with 1-ch bidirectional Data Transceiver	1310   1550	17	20	1
	<b>FTD110DB-SSR</b>	1 - ch Video Receiver with 1-ch bidirectional Data Transceiver				

- Options
- ST type connector is standard. For FC type, specify "F" in the suffix. E.g. FMT.
  - Please feel free to consult factory if longer transmission distance is required.
- Rack Mount Chassis
- FT-C18 is to be purchased separately. Please refer to accessories section for the details.

- 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., November 2013**

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