# FTD110DACB

## 8-bit Digital 1-ch Video with Bi-directional Data, Audio & Contact Closure

**VIDEO** 1 | **RS232 RS422 RS485 DATA** 1 | **AUDIO** 1 | **CC** 1

## 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

### Contact Closurel

- 2ms response time
- Normally open

### Audio

- 20Hz – 20KHz Bandwidth
- Transmit Balanced or Unbalanced Line-level Audio

### 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 -40ºC to +75ºC
- Designed for use in harsh environments

### Warranty
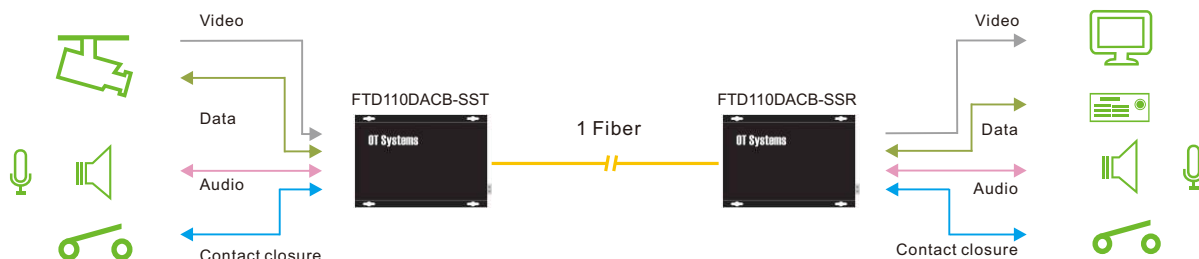
- Comprehensive Lifetime Warranty

## Description

The FTD110DACB series features high-performance laser-based optics for the clearest, most reliable data transmission. The video, data, audio and contact closure series fiber transmission products support fiber optic transmission of 8-Bit PCM coded video, bi-directional data, bi-directional audio and bi-directional contact closure in both single and multi-mode with no video degradation over the entire operating distance (up to 20km).

This budget-friendly plug-and-play product provides instant compatibility for most major security manufacturers' equipment and supports data, audio and control interface. Created for reliability in harsh environments, this series provides a perfect compliment to any commercial, government or intelligent transportation application.  The product features in card module or standalone type.

## Typical Application



Video
Data
Audio
Contact closure
FTD110DACB-SST
1 Fiber
FTD110DACB-SSR
Video
Data
Audio
Contact closure

## ▍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) |

### Contact Closures

| | |
|---|---|
| Number of Channels | 1 |
| Direction | Bi-directional |
| Input Type | Dry Contract / TTL input |
| Output Type | Dry contact, NO / NC |
| Dry contact Output Rating | Max. 32VDC/VAC @ 100mA |

### Audio

| | |
|---|---|
| Number of Channels | 1 |
| Audio Direction | Bi-directional |
| Input / Output Type | Balanced or Unbalanced |
| Input Level / Impedance | 0 dBm(nominal), 10K ohms |
| Output Level | +4dBm |
| Bandwidth | 20Hz-20KHz |
| Signal-to-Noise Ratio(SNR) | >66dB |

### LED

| | |
|---|---|
| Video Signal Indication (Presence) | Green LED lit |
| Data In / Out | Red/Green LED lit |
| Contact Closure In / Out | Red/Green LED lit |
| Audio 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 |
| Contact Closure Input / Output | 5-pin screw terminal |
| Audio Input / Output | 5-pin screw terminal |
| Power (Standalone) | 2-pin screw terminal |
| Power (Rack-Mount) | Bus connector |

### Electrical and Mechanical

| | |
|---|---|
| Power (Standalone) | 12VDC @ 4.2W |
| Power (Rack Mount) | From FT-C18 Chassis |
| Dimensions(WxHxD) (Standalone) | 156 x 30.5 x 223mm(Max) |
| Dimensions(WxHxD) (Rack Mount) | 148 x 20.4 x 213mm(Max) |
| Shipping Weight (Standalone) | 0.56kg |
| Shipping Weight (Rack Mount) | 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) | FTD110DACB-SMT | 1 - ch Video Transmitter with bidirectional Data, Audio and Contact Closure Transceiver | 1310 \| 1550 | 23 | 4 | 2 |
| | FTD110DACB-SMR | 1 - ch Video Receiver with bidirectional Data, Audio and Contact Closure Transceiver | | | | |
| Single-mode (9/125µm) | FTD110DACB-SST | 1 - ch Video Transmitter with bidirectional Data, Audio and Contact Closure Transceiver | 1310 \| 1550 | 17 | 20 | 2 |
| | FTD110DACB-SSR | 1 - ch Video Receiver with bidirectional Data, Audio and Contact Closure Transceiver | | | | |

| | |
|---|---|
| Options | ▪ ST type connector is standard. For FC type, specify "F" in the suffix. E.g. FMT. |
| | ▪ For Standaone type, please add "SA". E.g. SMTSA |
| | ▪ Please feel free to consult factory if longer transmission distance is required. |
| Power Adaptor | ▪ Power adaptor is included for Standalone type only. |
| 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.
- 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.

**OT Systems Ltd., November 2013**
Due to continuous improvement, all product specifications are subject to change without further notice.

Video Transmission