# FT110AB / FT210AB / FT410AB / FT810AB

10-bit Digital 1/2/4/8-ch Video with 1-ch Bi-directional Audio







## Features

#### Video

- NTSC or PAL video standards supported
- Non-compressed 10-bit digitally encoded video
- No video degradation over the maximum operating distance

#### Audio

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

#### Optica

- 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 FTD110AB/FT210AB/FT410AB/FT810AB series features high-performance laser-based optics for the clearest, most reliable data transmission. The video and audio series fiber transmission products support fiber optic transmission of 8-Bit PCM coded video and 1 channel bi-directional audio 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 audio 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



# Specifications

## Video

Number of Channels 1/2/4/8 NTSC/PAL/SECAM Format 1 Volt pk-pk (75 ohms) Input/Output >=6MHz Bandwidth Differential Gain <1% Typical Differential Phase <1 Degree Typical SNR-CCIR weighted >65dB

## Audio

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

Video Signal Indication (Presence) Audio In / Out Optical Carrier Detected

Green LED lit Red/Green LED lit Yellow / Active Red/On

#### Connectors

Video Input / Output Optical Input / Output Audio Input / Output Power (Standalone) Power (Rack-Mount)

BNC ST (standard), FC (optional) 7-pin screw terminal 2-pin screw terminal Bus connector

## **Electrical and Mechanical**

#### FT110AB / FT210AB

12VDC @ 4.8W Power (Standalone) 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) 0.56ka Shipping Weight (Rack Mount) 0.2ka

#### FT410AB

Power (Standalone) 12VDC @ 5.4W Power (Rack Mount) From FT-C18 Chassis Dimensions(WxHxD) (Standalone) 156 x 30.5 x 223mm(Max) 148 x 20.4 x 213mm(Max) Dimensions(WxHxD) (Rack Mount) Shipping Weight (Standalone) 0.58kg (Max) Shipping Weight (Rack Mount) 0.25kg (Max)

### FT810AB

12VDC @ 6.6W Power (Standalone) From FT-C18 Chassis Power (Rack Mount) Dimensions(WxHxD) (Standalone) 156 x 50.5 x 223mm(Max) Dimensions(WxHxD) (Rack Mount) 148 x 41.4 x 213mm(Max) Shipping Weight (Standalone) 0.82kg Shipping Weight (Rack Mount) 0.35kg

### **Environmental**

-40°C to +75°C Operating Temp 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)	FT110AB-SMT FT110AB-SMR	1-ch Video Transmitter / Receiver with 1-ch bidirectional Audio Transceiver	1310   1550	23	4	1
	FT210AB-SMT FT210AB-SMR	2 - ch Video Transmitter / Receiver with 1-ch bidirectional Audio Transceiver	1310   1550	23	2	1
	FT410AB-SMT FT410AB-SMR	4 - ch Video Transmitter / Receiver with 1-ch bidirectional Audio Transceiver	1310   1550	23	2	1
	FT810AB-SMT FT810AB-SMR	8-ch Video Transmitter / Receiver with 1-ch bidirectional Audio Transceiver	1310   1550	23	1	2
Single-mode (9/125μm)	FT110AB-SST FT110AB-SSR	1-ch Video Transmitter / Receiver with 1-ch bidirectional Audio Transceiver	1310   1550	17	20	1
	FT210AB-SST FT210AB-SSR	2 - ch Video Transmitter / Receiver with 1-ch bidirectional Audio Transceiver	1310   1550	17	20	1
	FT410AB-SST FT410AB-SSR	4 - ch Video Transmitter / Receiver with 1-ch bidirectional Audio Transceiver	1310   1550	17	20	1
	FT810AB-SST FT810AB-SSR	8-ch Video Transmitter / Receiver with 1-ch bidirectional Audio Transceiver	1310   1550	17	20	2

Options

- ST type connector is standard. For FC type, specify "F" in the suffix. E.g. FMT.
- For Standalone 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 in 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
  - 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.