# FT2X0AB Series

## 10-bit Digital 2-ch Video with 1 or 2 Bi-directional Audio
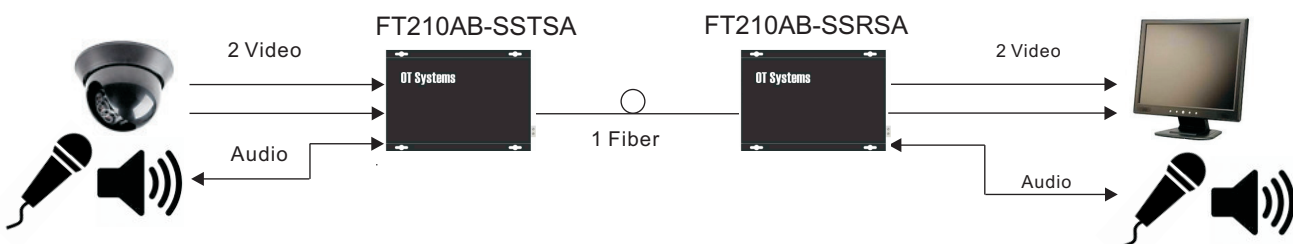
**OT Systems**

The FT2X0AB series supports optical transmission of high-quality 10-bit PCM coded video with bi-directional 24-bit PCM coded audio through one fiber either in multimode or singlemode.

It provides a cost-effective solution for the transmission of two-channel video together with either one or two audio channel(s). Either standalone or card module is available for different installation requirements.

## Features

- Two-Channel Non-compressed 10-bit digital video transmission
- No video degradation over max. operating distance
- Signal to noise ratio better than 65 dB
- Supports NTSC, PAL & SECAM video systems
- Gold plated BNC connector
- Supports one or two bi-directional audio
- 24-bit digital audio processing
- Laser diode for optical transmission
- Supports balanced or unbalanced audio
- Optimum sensitivity for power budget concerns
- Excellent suppression of EMI & RFI and elimination of ground loop

- Adjustment and maintenance free
- No setup but just plug-and-play
- Hot-swappable card modules
- LED indicators for audio Tx & Rx levels
- Duplicated LED indicators on the front and rear of the unit for the convenience of observation
- Robust design for harsh environment applications
- Standalone or card module
- Transient voltage protection on power supply and all signal inputs & outputs

## Typical Application

FT210AB-SSTSA          FT210AB-SSRSA

2 Video          2 Video

Audio          1 Fiber          Audio

# FT2X0AB Series

## Ordering Information

| Model | Description | No. of Fibers (Wavelengths) | Optical Power Budget | Max. Distance |
|---|---|---|---|---|
| **MULTIMODE (62.5/125 um)** | | | | |
| FT210AB-SMT | 2 Video Transmitter/1 Audio Transceiver | | | |
| FT210AB-SMR | 2 Video Receiver/1 Audio Transceiver | 1 (1310/1550 nm) | 23 dB | 2 km |
| FT220AB-SMT | 2 Video Transmitter/2 Audio Transceiver | | | |
| FT220AB-SMR | 2 Video Receiver/2 Audio Transceiver | | | |
| **SINGLEMODE (9/125 um)** | | | | |
| FT210AB-SST | 2 Video Transmitter/1 Audio Transceiver | | | |
| FT210AB-SSR | 2 Video Receiver/1 Audio Transceiver | 1 (1310/1550 nm) | 17 dB | 40 km |
| FT220AB-SST | 2 Video Transmitter/2 Audio Transceiver | | | |
| FT220AB-SSR | 2 Video Receiver/2 Audio Transceiver | | | |
| FT210AB-SSTL | 2 Video Transmitter/1 Audio Transceiver | | | |
| FT210AB-SSRL | 2 Video Receiver/1 Audio Transceiver | 1 (1310/1550 nm) | 24 dB | 60 km |
| FT220AB-SSTL | 2 Video Transmitter/2 Audio Transceiver | | | |
| FT220AB-SSRL | 2 Video Receiver/2 Audio Transceiver | | | |

**Accessories:** FT-C18. 19" rack mount chassis (purchased separately) for housing card modules
FT-PA/12V. 12VDC power adapter included for standalone (US, European, UK or Australian power plug)
**Options:** Model numbers specified above are for Card Modules, please add '*SA*' for Standalone. eg. FT210AB-SMT*SA*
ST type connector is standard. For FC type, specify '*F*' in the model number. Eg. FT210AB-*F*MT

NOTES: (1) Transmission distance will suffer if additional losses are introduced by the optical connectors, fusions, splices and the fibers within the network.

(2) Operating distance of multimode is limited by the characteristics of the fiber bandwidth.

(3) Power adaptor is manufactured by third party and is supplied with fitted screw-terminal output cables.

(4) Please feel free to consult factory for any special requirement and customization

## Specifications

### Video

| | |
|---|---|
| No. of Channels: | 2 |
| Bandwidth: | 6.5MHz |
| Format: | PAL / NTSC / SECAM |
| Input / Output: | 1.0 Vp-p, 75 ohms |
| Differential Gain: | < 1% typical |
| Differential Phase: | < 1$^\circ$ typical |
| Signal-to-Noise Ratio: | > 65dB |

### Audio

| | |
|---|---|
| No. of Channels: | 1 or 2 |
| Audio Direction: | Bi-directional |
| Audio Bandwidth | 20 Hz ~ 20K Hz |
| Input Level / Impedance: | 0 dBm (nominal); 10K ohms, balanced or unbalanced |
| Output Level: | +4 dBm |
| Signal-to-Noise Ratio: | >65 dB |

### Connectors

| | |
|---|---|
| Optical: | ST (standard), FC |
| Video: | BNC |
| Audio: | 5-pin screw terminal |
| Power: | SA: 2-pin screw terminal |
| | Card: Futurebus connector |

### Electrical and Mechanical

| | |
|---|---|
| Power: | SA: 12VDC @ 5.2(6.5*)W |
| | Card: From FT-C18 chassis |
| Dimensions (HxWxD): | SA: 30(50*) x 156 x 212mm |
| | Card: 154 x 20.4(41*) x 212mm |
| Weight: | SA: 0.68(0.92*)kg |
| | Card type: 0.25(0.40*)kg |
| No. of rack slots: | 1(2*) |
| LED Indicators: | Power, Video per channel, Optical carrier detected, Audio Tx & Rx |

*Specifications of FT220AB

### 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 |

10-bit Digital Video

ISO 9001:2000
FM 88638

FC  CE  UL  RoHS Compliant  Lifetime Warranty

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