### FT2X0DB Series

# **OT Systems**

#### 10-bit Digital 2-ch Video with 1 or 2 Bi-directional Data







The FT2X0DB series supports optical transmission of high-quality 10-bit PCM coded video with bi-directional data through one fiber either in multimode or singlemode.

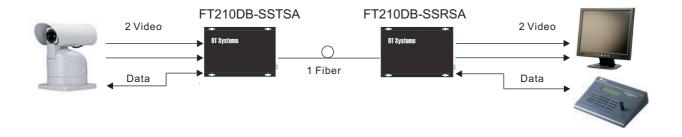
It provides a cost-effective solution for the transmission of two-channel video together with either one or two data channel(s). Either standalone or card module is available for different installation requirements.

#### **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 data
- Supports multi-protocol data in RS232, RS422 & RS485(2 or 4-wire) Tri-state formats
- External access for data format selection via DIP switches
- Laser diode for optical transmission

- Optimum sensitivity for power budget concerns
- Excellent suppression of EMI & RFI and elimination of ground loop
- Adjustment and maintenance free
- No setup just plug-and-play
- Hot-swappable card modules
- Duplicated LED indicators on the front and rear of the unit for the convenience of observation
- Transient voltage protection on power supply and all signal inputs & outputs
- Robust design for harsh environment applications
- Standalone or card module

## **Typical Application**



# **FT2X0DB Series**

#### Ordering Information

Model	Description	No. of Fibers (Wavelengths)	Optical Power Budget	Max. Distance		
MULTIMODE (62.5/125 um)						
FT210DB-SMT FT210DB-SMR FT220DB-SMT FT220DB-SMR	<ul><li>2 Video Transmitter/1 Data Transceiver</li><li>2 Video Receiver/1 Data Transceiver</li><li>2 Video Transmitter/2 Data Transceiver</li><li>2 Video Receiver/2 Data Transceiver</li></ul>	1 (1310/1550 nm)	23 dB	2 km		
SINGLEMODE (9/125 um)						
FT210DB-SST FT210DB-SSR FT220DB-SST FT220DB-SSR	<ul><li>2 Video Transmitter/1 Data Transceiver</li><li>2 Video Receiver/1 Data Transceiver</li><li>2 Video Transmitter/2 Data Transceiver</li><li>2 Video Receiver/2 Data Transceiver</li></ul>	1 (1310/1550 nm)	17 dB	40 km		
FT210DB-SSTL FT210DB-SSRL FT220DB-SSTL FT220DB-SSRL	2 Video Transmitter/2 Data Transceiver	1 (1310/1550 nm)	24 dB	60 km		
Accessories: Options:	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) Model numbers specified above are for Card Modules, please add 'SA' for Standalone. eg. FT210DB-SMTSA ST type connector is standard. For FC type, specify 'F' in the model number. Eg. FT210DB-FMT					

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		Connectors	
No. of Channels: Bandwidth: Format: Input / Output: Differential Gain:	2 6.5MHz per channel PAL / NTSC / SECAM 1.0 Vp-p, 75 ohms < 1% typical	Optical: Video: Data: Power:	ST (standard), FC BNC 7-pin screw terminal SA: 2-pin screw terminal Card: Futurebus connector
Differential Phase: Signal-to-Noise Ratio:	<°1 typical > 65dB	Electrical and Me	echanical
Data	- 00dB	Power:	SA: 12VDC @ 4.8W Card: From FT-C18 chassis
No. of Channels: Data Direction:	1 or 2 Bi-directional	Dimensions (HxWxD):	SA: 30(50*) x 156 x 212mm Card: 154 x 20.4(41*) x 212mm
Data Interface:	DIP switch-selectable RS232, RS422, RS485(2 or 4-wire) Tri-state	Weight:  No. of rack slots:	SA: 0.68(0.92*)kg Card type: 0.25(0.40*)kg 1(2*)
Data Format: Data Rate:	MPD (Manchester, Bi-phase, etc) 0~256Kbps	LED Indicators:	Power, Video per channel, Optical carrier detected,
		*Specifications of FT220DB	Data Tx & Rx
		Environmental	
FE C	E UL Lifetime Warranty	Operating Temp.: Storage Temp.: Relative Humidity:	-40°C to +75°C -40°C to +85°C 0 to 95% non-condensing

MTBF:

> 100,000 hours