

# FT8X0DB Series

# OT Systems

## 10-bit Digital 8-ch Video with 1 or 2 Bi-directional Data



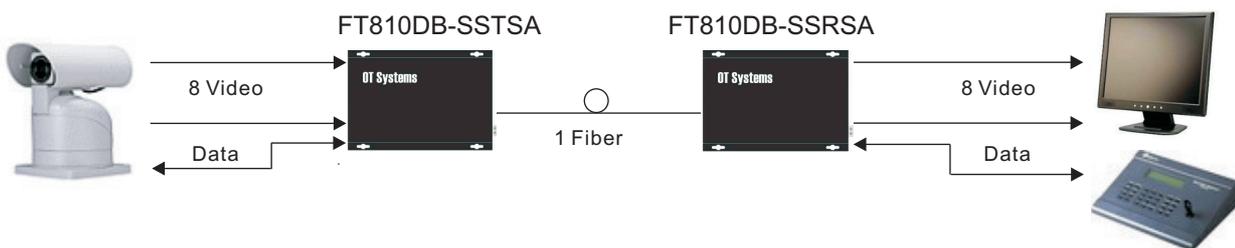
The FT8X0DB series supports optical transmission of high-quality 10-bit PCM coded video with bi-directional data through one fiber either in multimode or singlemode.

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

### Features

- Eight-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



10-bit Digital Video

# FT8X0DB Series

## Ordering Information

Model	Description	No. of Fibers (Wavelengths)	Optical Power Budget	Max. Distance
<b>MULTIMODE (62.5/125 <math>\mu</math>m)</b>				
FT810DB-SMT	8 Video Transmitter/1 Data Transceiver	1 (1310/1550 nm)	23 dB	1 km
FT810DB-SMR	8 Video Receiver/1 Data Transceiver			
FT820DB-SMT	8 Video Transmitter/2 Data Transceiver			
FT820DB-SMR	8 Video Receiver/2 Data Transceiver			
<b>SINGLEMODE (9/125 <math>\mu</math>m)</b>				
FT810DB-SST	8 Video Transmitter/1 Data Transceiver	1 (1310/1550 nm)	17 dB	40 km
FT810DB-SSR	8 Video Receiver/1 Data Transceiver			
FT820DB-SST	8 Video Transmitter/2 Data Transceiver			
FT820DB-SSR	8 Video Receiver/2 Data Transceiver			
FT810DB-SSTL	8 Video Transmitter/1 Data Transceiver	1 (1310/1550 nm)	24 dB	60 km
FT810DB-SSRL	8 Video Receiver/1 Data Transceiver			
FT820DB-SSTL	8 Video Transmitter/2 Data Transceiver			
FT820DB-SSRL	8 Video Receiver/2 Data Transceiver			
<b>Accessories:</b>	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)			
<b>Options:</b>	Model numbers specified above are for Card Modules, please add ' <b>SA</b> ' for Standalone. eg. FT810DB-SMT <b>SA</b> ST type connector is standard. For FC type, specify ' <b>F</b> ' in the model number. Eg. FT810DB- <b>F</b> 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		Connectors	
No. of Channels:	8	Optical:	ST (standard), FC
Bandwidth:	6.5MHz per channel	Video:	BNC
Format:	PAL / NTSC / SECAM	Data:	7-pin screw terminal
Input / Output:	1.0 Vp-p, 75 ohms	Power:	SA: 2-pin screw terminal Card: Futurebus connector
Differential Gain:	< 1% typical	<b>Electrical and Mechanical</b>	
Differential Phase:	< 1° typical		
Signal-to-Noise Ratio:	> 65dB	Power:	SA: 12VDC @ 6.0W Card: From FT-C18 chassis
<b>Data</b>		Dimensions (HxWxD):	SA: 50 x 156 x 212mm Card: 154 x 41 x 212mm
No. of Channels:	1 or 2	Weight:	SA: 0.97kg Card type: 0.45kg
Data Direction:	Bi-directional	No. of rack slots:	2
Data Interface:	DIP switch-selectable RS232, RS422, RS485(2 or 4-wire) Tri-state	LED Indicators:	Power, Video per channel, Optical carrier detected, Data Tx & Rx
Data Format:	MPD (Manchester, Bi-phase, etc)	<b>Environmental</b>	
Data Rate:	0~256Kbps	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