FT110DB / FT210DB / FT410DB / FT810DB

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

1 ~ 8 VIDEO   **RS232 RS422 RS485 DATA 1**

Features

Video

- NTSC or PAL video standards supported
- Non-compressed 10-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

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

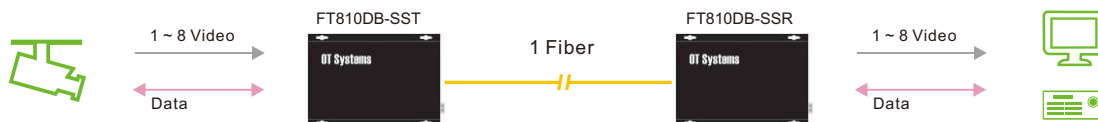### Warranty

- Comprehensive Lifetime Warranty

Description

The FT110BD/FT210DB/FT410DB/FT810DB 10-Bit Digital Video and Data transmission products, support fiber optical transmission of 10-Bit PCM coded video (up to 8 channels) with one bi-directional data and features high-performance laser-based optics for the clearest, most reliable data transmission in both single and multi-mode with no video degradation over the entire operating distance (up to 20 km).

This plug-and-play product family provides instant compatibility for most major security manufacturers' equipment and reliability in harsh environments, a perfect compliment to any commercial, government or intelligent transportation application. The product features card module or standalone type.

Typical Application

◼ Specifications

Video

Number of Channels	1 / 2 / 4 / 8
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	>65dB

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)

LED

Video Signal Indication (Presence)	Green LED lit
Data 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
Power (Standalone)	2-pin screw terminal
Power (Rack-Mount)	Bus connector

Electrical and Mechanical

FT110DB / FT210DB

Power (Standalone)	12VDC @ 4.8W
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)	0.2kg

FT410DB

Power (Standalone)	12VDC @ 5.4W
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)	0.58kg (Max)
Shipping Weight (Rack Mount)	0.25kg (Max)

FT810DB

Power (Standalone)	12VDC @ 6.6W
Power (Rack Mount)	From FT-C18 Chassis
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

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)	FT110DB-SMT FT110DB-SMR	1 - ch Video Transmitter / Receiver with 1-ch bidirectional Data Transceiver	1310 | 1550	23	4	1
	FT210DB-SMT FT210DB-SMR	2 - ch Video Transmitter / Receiver with 1-ch bidirectional Data Transceiver	1310 | 1550	23	2	1
	FT410DB-SMT FT410DB-SMR	4 - ch Video Transmitter / Receiver with 1-ch bidirectional Data Transceiver	1310 | 1550	23	2	1
	FT810DB-SMT FT810DB-SMR	8 - ch Video Transmitter / Receiver with 1-ch bidirectional Data Transceiver	1310 | 1550	23	1	2
Single-mode (9/125µm)	FT110DB-SST FT110DB-SSR	1 - ch Video Transmitter / Receiver with 1-ch bidirectional Data Transceiver	1310 | 1550	17	20	1
	FT210DB-SST FT210DB-SSR	2 - ch Video Transmitter / Receiver with 1-ch bidirectional Data Transceiver	1310 | 1550	17	20	1
	FT410DB-SST FT410DB-SSR	4 - ch Video Transmitter / Receiver with 1-ch bidirectional Data Transceiver	1310 | 1550	17	20	1
	FT810DB-SST FT810DB-SSR	8 - ch Video Transmitter / Receiver with 1-ch bidirectional Data 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 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.

ISO 9001:2000
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Due to continuous improvement, all product specifications are subject to change without further notice.

Video Transmission