

# FT410DBE Series

# OT Systems

10-bit Digital 4-ch Video with 1 Bi-directional Data & 10/100Mbps Ethernet



The FT410DBE series supports optical transmission of high-quality 10-bit PCM coded video with bi-directional data and 100Mbps Ethernet through one fiber either in multimode or singlemode.

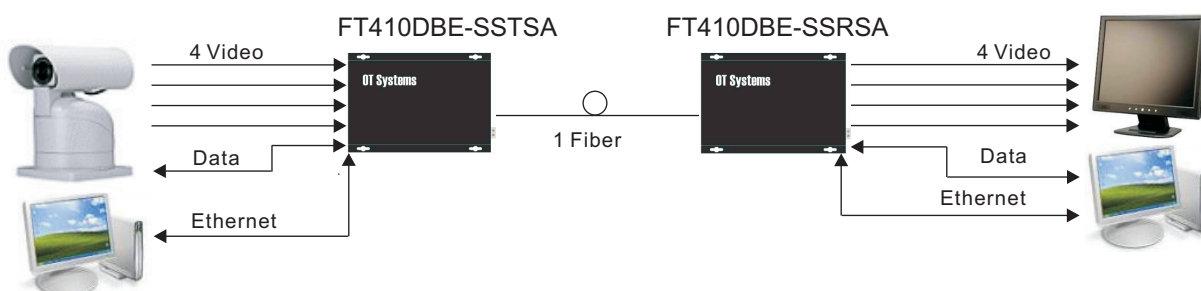
It provides a cost-effective solution for the transmission of four-channel video together with one data channel and one Ethernet. Either standalone or card module is available for different installation requirements.

## Features

- Four-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
- Support full duplex 100Mbps Ethernet signal
- 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

10-bit Digital Video

## Typical Application



# FT410DBE Series

## Ordering Information

Model	Description	No. of Fibers (Wavelengths)	Optical Power Budget	Max. Distance
<b>MULTIMODE (62.5/125 um)</b>				
FT410DBE-SMT	4 Video Transmitter/1 Data, Ethernet Transceiver	1 (1310/1550 nm)	17 dB	1 km
FT410DBE-SMR	4 Video Receiver/1 Data, Ethernet Transceiver			
<b>SINGLEMODE (9/125 um)</b>				
FT410DBE-SST	4 Video Transmitter/1 Data, Ethernet Transceiver	1 (1310/1550 nm)	17 dB	40 km
FT410DBE-SSR	4 Video Receiver/1 Data, Ethernet Transceiver			
FT410DBE-SSTL	4 Video Transmitter/1 Data, Ethernet Transceiver	1 (1490/1550 nm)	24 dB	60 km
FT410DBE-SSRL	4 Video Receiver/1 Data, Ethernet 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 'SA' for Standalone. eg. FT410DBE-SMTSA ST type connector is standard. For FC type, specify 'F' in the model number. Eg. FT410DBE-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

<b>Video</b>		<b>Connectors</b>	
No. of Channels:	4	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	Ethernet:	8-pin RJ45
Differential Gain:	< 1% typical	Power:	SA: 2-pin screw terminal Card: Futurebus connector
Differential Phase:	< 1° typical		
Signal-to-Noise Ratio:	> 65dB		
<b>Data</b>		<b>Electrical and Mechanical</b>	
No. of Channels:	1	Power:	SA: 12VDC @ 7.5W Card: From FT-C18 chassis
Data Direction:	Bi-directional	Dimensions (HxWxD):	SA: 50 x 156 x 212mm Card: 154 x 41 x 212mm
Data Interface:	DIP switch-selectable RS232, RS422, RS485(2 or 4-wire) Tri-state	Weight:	SA: 0.97kg Card type: 0.45kg
Data Format:	MPD (Manchester, Bi-phase, etc)	No. of rack slots:	2
Data Rate:	0~256Kbps	LED Indicators:	Power, Video per channel, Optical carrier detected, Data Tx & Rx, Comm. link, Ethernet speed
<b>Ethernet</b>		<b>Environmental</b>	
No. of Channels:	1	Operating Temp.:	-40°C to +75°C
Transmission Format:	10/100 Base T; Full duplex	Storage Temp.:	-40°C to +85°C
		Relative Humidity:	0 to 95% non-condensing
		MTBF:	> 100,000 hours

