FT210DBE Series

10-bit Digital 2-ch Video with 1 Bi-directional Data & 10/100Mbps Ethernet

V2 D1 E1

The FT210DBE 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 two-channel video together with one data channel and one Ethernet. Either standalone or card module is available for different installation requirements.

2-ch Video

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 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
- Supports 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

Typical Application
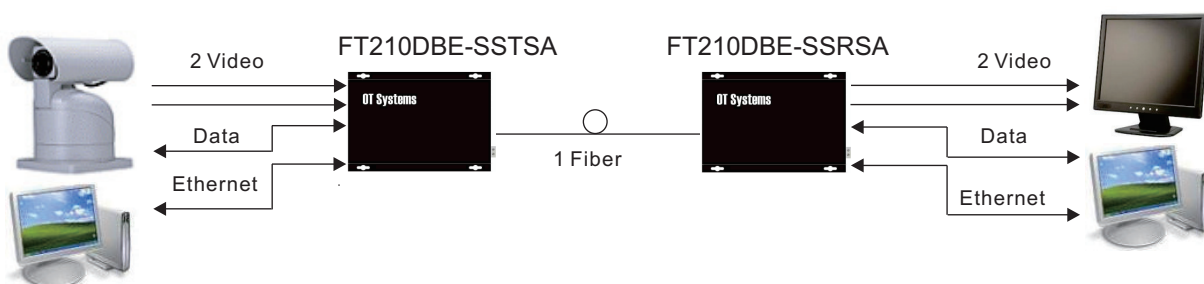
FT210DBE Series

Ordering Information

Model	Description	No. of Fibers (Wavelengths)	Optical Power Budget	Max. Distance
MULTIMODE (62.5/125 um)				
FT210DBE-SMT FT210DBE-SMR	2 Video Transmitter/1 Data, Ethernet Transceiver 2 Video Receiver/1 Data, Ethernet Transceiver	1 (1310/1550 nm)	17 dB	1 km
SINGLEMODE (9/125 um)				
FT210DBE-SST FT210DBE-SSR	2 Video Transmitter/1 Data, Ethernet Transceiver 2 Video Receiver/1 Data, Ethernet Transceiver	1 (1310/1550 nm)	17 dB	40 km
FT210DBE-SSTL FT210DBE-SSRL	2 Video Transmitter/1 Data, Ethernet Transceiver 2 Video Receiver/1 Data, Ethernet Transceiver	1 (1490/1550 nm)	24 dB	60 km

Accessories:	FT-C18. 19" rack mount chassis (purchased separately) for housing card modules
Options:	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. FT210DBE-SMT*SA*
	ST type connector is standard. For FC type, specify '*F*' in the model number. Eg. FT210DBE-*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:	≧6MHz per channel
Format:	PAL / NTSC / SECAM
Input / Output:	1.0 Vp-p, 75 ohms
Differential Gain:	< 1% typical
Differential Phase:	< 1° typical
Signal-to-Noise Ratio:	> 65dB

Data

No. of Channels:	1
Data Direction:	Bi-directional
Data Interface:	DIP switch-selectable RS232, RS422, RS485(2 or 4-wire) Tri-state
Data Format:	MPD (Manchester, Bi-phase, etc)
Data Rate:	0~256Kbps

Ethernet

No. of Channels:	1
Transmission Format:	10/100 Base T; Full duplex

Connectors

Optical:	ST (standard), FC
Video:	BNC
Data:	7-pin screw terminal
Ethernet:	8-pin RJ45
Power:	SA: 2-pin screw terminal
	Card: Futurebus connector

Electrical and Mechanical

Power:	SA: 12VDC @ 5.4W
	Card: From FT-C18 chassis
Dimensions (WxHxD):	SA: 156 x 50.5 x 223mm (Max)
	Card: 148 x 41.4 x 213mm (Max)
Weight:	SA: 0.76kg
	Card type: 0.4kg
No. of rack slots:	2
LED Indicators:	Power, Video per channel, Optical carrier detected, Data Tx & Rx, Comm. link, Ethernet speed

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

ISO 9001:2000
FM 88638

FC   CE   RoHS Compliant   Lifetime Warranty

OT Systems Ltd., April 2011

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

2-ch Video