

FT110DBE Series

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



The FT110DBE 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.

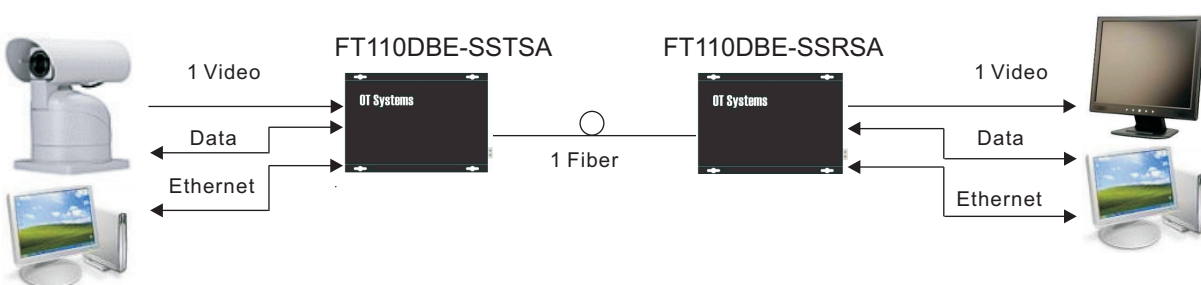
It provides a cost-effective solution for the transmission of one-channel video together with one data channel and one Ethernet. Either standalone or card module is available for different installation requirements.

Features

- 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



FT110DBE Series

Ordering Information

Model	Description	No. of Fibers (Wavelengths)	Optical Power Budget	Max. Distance
MULTIMODE (62.5/125 μm)				
FT110DBE-SMT	1 Video Transmitter/1 Data, Ethernet Transceiver	1 (1310/1550 nm)	17 dB	1 km
FT110DBE-SMR	1 Video Receiver/1 Data, Ethernet Transceiver			
SINGLEMODE (9/125 μm)				
FT110DBE-SST	1 Video Transmitter/1 Data, Ethernet Transceiver	1 (1310/1550 nm)	17 dB	40 km
FT110DBE-SSR	1 Video Receiver/1 Data, Ethernet Transceiver			
FT110DBE-SSTL	1 Video Transmitter/1 Data, Ethernet Transceiver	1 (1490/1550 nm)	24 dB	60 km
FT110DBE-SSRL	1 Video Receiver/1 Data, Ethernet Transceiver			

Accessories: 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)

Options: Model numbers specified above are for Card Modules, please add '**SA**' for Standalone. eg. FT110DBE-SMT**SA**
 ST type connector is standard. For FC type, specify '**F**' in the model number. Eg. FT110DBE-**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:	1	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
Differential Phase:	< 1° typical		Card: Futurebus connector
Signal-to-Noise Ratio:	> 65dB		
Data		Electrical and Mechanical	
No. of Channels:	1	Power:	SA: 12VDC @ 7.5W
Data Direction:	Bi-directional		Card: From FT-C18 chassis
Data Interface:	DIP switch-selectable RS232, RS422, RS485(2 or 4-wire) Tri-state	Dimensions (HxWxD):	SA: 50 x 156 x 212mm
Data Format:	MPD (Manchester, Bi-phase, etc)		Card: 154 x 41 x 212mm
Data Rate:	0~256Kbps	Weight:	SA: 0.95kg
			Card type: 0.40kg
		No. of rack slots:	2
		LED Indicators:	Power, Video, Optical carrier detected, Data Tx & Rx, Comm. link, Ethernet speed
Ethernet		Environmental	
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



Lifetime Warranty