FT110DBE Series

OT Systems

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.

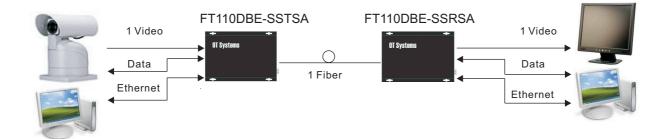
It provides a cost-effective solution for the transmission of one-channel video together with one data channel and one Ethernet. Either standalone or card module is available for different installation requirements.

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

Typical Application



FT110DBE Series

Ordering Information

| Model | Description | No. of Fibers (Wavelengths) | Optical Power Budget | Max. Distance | | |
|--------------------------------|--|--------------------------------|----------------------------|------------------|--|--|
| | MULTIMODE (62.5/125 um |) | | | | |
| FT110DBE-SMT FT110DBE-SMR | 1 Video Transmitter/1 Data, Ethernet Transceiver 1 Video Receiver/1 Data, Ethernet Transceiver | 1 (1310/1550 nm) | 17 dB | 1 km | | |
| SINGLEMODE (9/125 um) | | | | | | |
| FT110DBE-SST FT110DBE-SSR | 1 Video Transmitter/1 Data, Ethernet Transceiver 1 Video Receiver/1 Data, Ethernet Transceiver | 1 (1310/1550 nm) | 17 dB | 40 km | | |
| FT110DBE-SSTL FT110DBE-SSRL | | 1 (1490/1550 nm) | 24 dB | 60 km | | |
| Accessories: Options: | FT-PA/12V. 12VDC power adapter included for standalone (US, European, UK or Australian power plug) | | | | | |

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: Bandwidth: Format: Input / Output: Differential Gain: Differential Phase: Signal-to-Noise Ratio: | 1 6.5MHz per channel PAL / NTSC / SECAM 1.0 Vp-p, 75 ohms < 1% typical < 1° typical > 65dB | Optical: Video: Data: Ethernet Power: | ST (standard), FC BNC 7-pin screw terminal 8-pin RJ45 SA: 2-pin screw terminal Card: Futurebus connector | |
| Data | | Electrical and Mechanical | | |
| No. of Channels: Data Direction: Data Interface: Data Format: Data Rate: Ethernet | 1 Bi-directional DIP switch-selectable RS232, RS422, RS485(2 or 4-wire) Tri-state MPD (Manchester, Bi-phase, etc) 0~256Kbps | Power: Dimensions (HxWxD): Weight: No. of rack slots: LED Indicators: | SA: 12VDC @ 7.5W Card: From FT-C18 chassis SA: 50 x 156 x 212mm Card: 154 x 41 x 212mm SA: 0.95kg Card type: 0.40kg 2 Power, Video, Optical carrier | |
| No. of Channels: | 1 | | detected, Data Tx & Rx, Comm. link, Ethernet speed | |
| Transmission Format: | 10/100 Base T; Full duplex | Environmental | | |
| | | Operating Temp.: Storage Temp.: Relative Humidity: MTBF: | -40°C to +75°C -40°C to +85°C 0 to 95% non-condensing > 100.000 hours | |











