FT1X0DB Series

OT Systems

10-bit Digital 1-ch Video with 1 or 2 Bi-directional Data







The FT1X0DB series supports optical transmission of high-quality 10-bit PCM coded video with bi-directional data through one fiber either in multimode or singlemode.

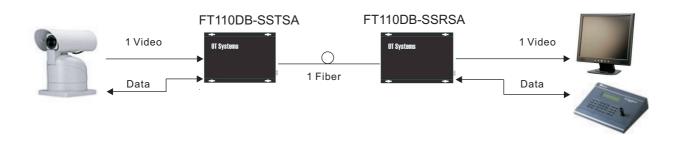
It provides a cost-effective solution for the transmission of one-channel video together with either one or two data channel(s). Either standalone or card module is available for different installation requirements.

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
- 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



FT1X0DB Series

Ordering Information

| Model | Description | No. of Fibers (Wavelengths) | Optical Power Budget | Max. Distance | | |
|--|---|--------------------------------|----------------------------|------------------|--|--|
| MULTIMODE (62.5/125 um) | | | | | | |
| FT110DB-SMT FT110DB-SMR FT120DB-SMT FT120DB-SMR | 1 Video Transmitter/1 Data Transceiver 1 Video Receiver/1 Data Transceiver 1 Video Transmitter/2 Data Transceiver 1 Video Receiver/2 Data Transceiver | 1 (1310/1550 nm) | 23 dB | 4 km | | |
| SINGLEMODE (9/125 um) | | | | | | |
| FT110DB-SST FT110DB-SSR FT120DB-SST FT120DB-SSR | 1 Video Transmitter/1 Data Transceiver1 Video Receiver/1 Data Transceiver1 Video Transmitter/2 Data Transceiver1 Video Receiver/2 Data Transceiver | 1 (1310/1550 nm) | 17 dB | 40 km | | |
| FT110DB-SSTL FT110DB-SSRL FT120DB-SSTL FT120DB-SSRL | 1 Video Transmitter/1 Data Transceiver1 Video Receiver/1 Data Transceiver1 Video Transmitter/2 Data Transceiver1 Video Receiver/2 Data Transceiver | 1 (1310/1550 nm) | 24 dB | 60 km | | |
| Accessories: Options: | FT-PA/12V. 12VDC power adapter included for standalone (US, European, UK or Australian power plug) | | | | | |

ST type connector is standard. For FC type, specify ${}^{\iota}F$ in the model number. Eg. FT110DB- ${}^{\iota}F$ 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 | | Connectors | | |
|--|--|--|---|--|
| No. of Channels: Bandwidth: Format: Input / Output: Differential Gain: | 1 6.5MHz per channel PAL / NTSC / SECAM 1.0 Vp-p, 75 ohms < 1% typical | Optical: Video: Data: Power: | ST (standard), FC BNC 7-pin screw terminal SA: 2-pin screw terminal Card: Futurebus connector | |
| Differential Phase: Signal-to-Noise Ratio: | < 1° typical > 65dB | Electrical and Mechanical | | |
| Data | | Power: | SA: 12VDC @ 3.6(4.8*)W Card: From FT-C18 chassis | |
| No. of Channels: Data Direction: | 1 or 2 Bi-directional | Dimensions (HxWxD): | SA: 30 x 156 x 212mm Card: 154 x 20.4 x 212mm | |
| Data Interface: | DIP switch-selectable RS232, RS422, RS485(2 or 4-wire) Tri-state | Weight: | SA: 0.65kg Card type: 0.20kg | |
| Data Format: | MPD (Manchester, Bi-phase, etc) | No. of rack slots: | 1 | |
| Data Rate: | 0~256Kbps | LED Indicators: | Power, Video, Optical carrier detected, Data Tx & Rx | |
| | | *Specifications of FT120DB | | |
| | | Environmental | | |
| | Lifetime Warranty | Operating Temp.: Storage Temp.: Relative Humidity: | -40°C to +75°C -40°C to +85°C 0 to 95% non-condensing | |













MTBF:

> 100,000 hours