FT1X0DR Series



10-bit Digital 1-ch Video with 1 or 2 Reverse Data





The FT1X0DR series supports optical transmission of high-quality 10-bit PCM coded video with reverse data through one fiber either in multimode or singlemode.

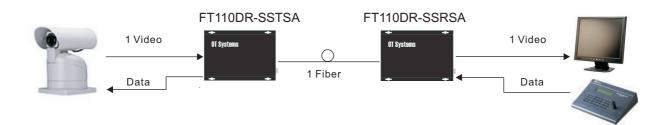
It provides a cost-effective solution for the transmission of one-channel video together with either one or two data channel(s). Either standalone or card module is available for different installation requirements.

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 reverse 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



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Ordering Information

Model	Description	No. of Fibers (Wavelengths)	Optical Power Budget	Max. Distance		
MULTIMODE (62.5/125 um)						
FT110DR-SMT FT110DR-SMR	1 Video Transmitter/1 Data Receiver 1 Video Receiver/1 Data Transmitter	1 (1310/1550 nm)	23 dB	4 km		
FT120DR-SMT FT120DR-SMR	1 Video Transmitter/2 Data Receiver 1 Video Receiver/2 Data Transmitter	1 (1010/1000 hill)				
SINGLEMODE (9/125 um)						
FT110DR-SST FT110DR-SSR FT120DR-SST FT120DR-SSR	1 Video Transmitter/1 Data Receiver 1 Video Receiver/1 Data Transmitter 1 Video Transmitter/2 Data Receiver 1 Video Receiver/2 Data Transmitter	1 (1310/1550 nm)	17 dB	40 km		
FT110DR-SSTL FT110DR-SSRL FT120DR-SSTL FT120DR-SSRL	1 Video Transmitter/2 Data Receiver	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)					

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:	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	Power:	SA: 2-pin screw terminal	
Differential Gain:	< 1% typical		Card: Futurebus connector	
Differential Phase: < 1° typical				
Signal-to-Noise Ratio:	> 65dB	Electrical and Mechanical		
		Power:	SA: 12VDC @ 3.6(4.8*)W	

Data

No. of Channels: Data Direction: Data Interface:

Data Format: Data Rate: 1 or 2 Reverse DIP switch-selectable RS232, RS422, RS485(2 or 4-wire) Tri-state MPD (Manchester, Bi-phase, etc) 0~256Kbps

Power:	SA: 12VDC @ 3.6(4.8*)W			
	Card: From FT-C18 chassis			
Dimensions (HxWxD):	SA: 30 x 156 x 212mm			
	Card: 154 x 20.4 x 212mm			
Weight:	SA: 0.65kg			
	Card type: 0.20kg			
No. of rack slots:	1			
LED Indicators:	Power, Video, Optical carrier			
	detected, Data Tx & Rx			

*Specifications of FT120DR Environmental

Connectors

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



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

Lifetime

Warranty