

## Microtype 8-bit Digital 1-ch Video with 1 Bi-directional Data



The FTD110DBMicro series supports optical transmission of 8-bit PCM coded video and one bi-directional data through one multimode or singlemode optical fiber. It is the smallest video with data transmitter/receiver pair among all OT Systems products. The transmitter only occupies limited space for easy installation within most camera housings.

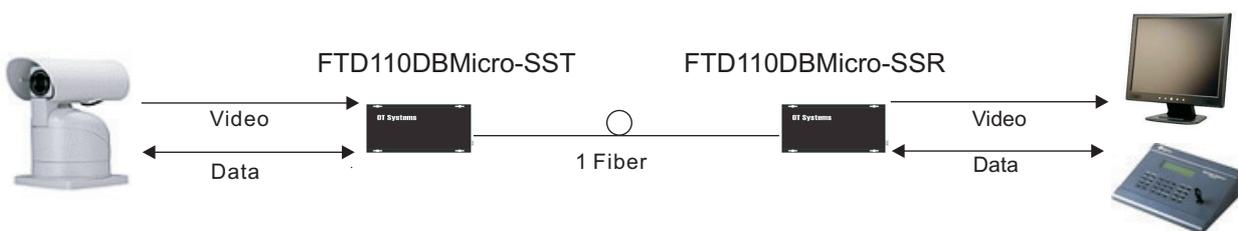
Transmitters of the FTD110DBMicro series are also compatible with receivers of the FTD110DB, FTD110DB-XXR3 and FTD110DBM series, catering to different system configurations.

8-bit Digital Video

### Features

- Non-compressed 8-bit digital video transmission
- No video degradation over max. operating distance
- Signal to noise ratio better than 60 dB
- Supports NTSC, PAL & SECAM video systems
- Supports 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
- Transient voltage protection on power supply and all signal inputs & outputs
- Robust design for harsh environment applications
- Microtype fits within most camera housing
- Transmitters of the FTD110DBMicro series are also compatible with receivers of the FTD110DB, FTD110DB-XXR3 and FTD110DBM series

### Typical Application



# FTD110DBMicro Series

## Ordering Information

Model	Description	No. of Fibers (Wavelengths)	Optical Power Budget	Max. Distance
<b>MULTIMODE (62.5/125 um)</b>				
FTD110DBMicro-SMT	Microtype 1 Video Transmitter/1 Data Transceiver	1 (1310/1550 nm)	23 dB	4 km
FTD110DBMicro-SMR	Microtype 1 Video Receiver/1 Data Transceiver			
<b>SINGLEMODE (9/125 um)</b>				
FTD110DBMicro-SST	Microtype 1 Video Transmitter/1 Data Transceiver	1 (1310/1550 nm)	17 dB	40 km
FTD110DBMicro-SSR	Microtype 1 Video Receiver/1 Data Transceiver			
FTD110DBMicro-SSTL	Microtype 1 Video Transmitter/1 Data Transceiver	1 (1310/1550 nm)	24 dB	60 km
FTD110DBMicro-SSRL	Microtype 1 Video Receiver/1 Data Transceiver			
<b>Compatibility:</b>	FTD110DBMicro-SMT also with FTD110DB-SMR, FTD110DB-SMR3 & FTD110DBM-SMR FTD110DBMicro-SST also with FTD110DB-SSR, FTD110DB-SSR3 & FTD110DBM-SSR FTD110DBMicro-SSTL also with FTD110DB-SSRL, FTD110DB-SSR3L & FTD110DBM-SSRL			
<b>Accessories:</b>	FT-PA/12V. 12VDC power adapter included (US, European, UK or Australian power plug)			
<b>Options:</b>	ST type connector is standard. For FT type, specify 'F' in the model number. Eg. FTD110DBMicro-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

<b>Video</b>		<b>Connectors</b>	
No. of Channels:	1	Optical:	ST (standard), FC
Bandwidth:	6.5MHz	Video:	BNC
Format:	PAL / NTSC / SECAM	Data:	7-pin screw terminal
Input / Output:	1.0 Vp-p, 75 ohms	Power:	2-pin screw terminal
Differential Gain:	< 1% typical	<b>Electrical and Mechanical</b>	
Differential Phase:	< 1° typical	Power:	12VDC @ 3W
Signal-to-Noise Ratio:	> 60dB	Dimensions (HxWxD):	35 x 36.2 x 96mm
<b>Data</b>		Weight:	0.35kg
No. of Channels:	1	LED Indicators:	Power, Video, Optical carrier detected, Data Tx & Rx
Data Direction:	Bi-directional	<b>Environmental</b>	
Data Interface:	DIP switch-selectable RS232, RS422, RS485(2 or 4-wire) Tri-state	Operating Temp.:	-40°C to +75°C
Data Format:	MPD (Manchester, Bi-phase, etc)	Storage Temp.:	-40°C to +85°C
Data Rate:	0~256Kbps	Relative Humidity:	0 to 95% non-condensing
		MTBF:	> 100,000 hours



**Lifetime Warranty**