

# FTD110DBMicro

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



## Features

### Video

- ▶ NTSC or PAL video standards supported
- ▶ Non-compressed 8-bit digitally encoded video
- ▶ No video degradation over the maximum operating distance

### Data

- ▶ Meets EIA RS-232/422/485 specifications
- ▶ Full RS-485 Tri-state support
- ▶ Half or full-duplex operation
- ▶ Transparent to data encoding
- ▶ Data rates from 0 to 256kbps

### Optical

- ▶ One fiber design
- ▶ High performance laser-based optics
- ▶ Multimode or Singlemode
- ▶ ST or FC connectors available

### Robust Design

- ▶ Plug-and-Play design, no in-field adjustments required.
- ▶ Microtype for Wall-mount installation
- ▶ Wide operating temperature range of -40°C to +75°C
- ▶ Designed for use in harsh environments

### Warranty

- ▶ Comprehensive Lifetime Warranty

## Description

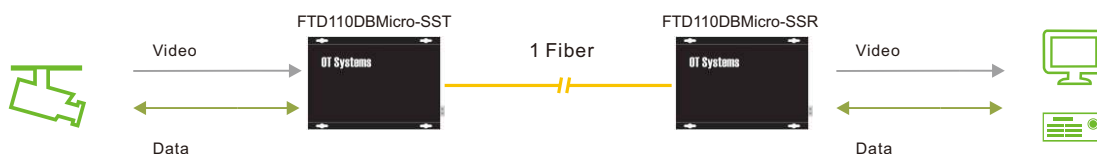
The FTD110DBMicro 8-Bit Digital Video and Data Modules, features high-performance laser-based optics for the clearest, most reliable data transmission over one fiber for both single and multi-mode with no video degradation over the entire operating distance (up to 20km), as well as RS-232/422/485 serial data ports.

This plug-and-play product provides instant product compatibility for most major security manufacturers' equipment and reliability in harsh environments, a perfect compliment to any commercial, government or intelligent transportation application. This small, but mighty, design also comes ready for wall-mounted applications.

These units are compatible with the FTD110DBMicro transmitters/receivers and FTD110DB-XXR3 receivers.

Video Transmission

## Typical Application



## Specifications

### Video

Number of Channels	1
Format	NTSC/PAL/SECAM
Input/Output	1 Volt pk-pk (75 ohms)
Bandwidth	>=6MHz
Differential Gain	<1% Typical
Differential Phase	<1 Degree Typical
SNR-CCIR weighted	>60dB

### Data

Number of Channels	1
Data Direction	Bi-directional
Data Interface	RS232, RS422, RS485 2 or 4-wire Tri-state
Selection Method	DIP switch-selectable
Data Rate	0-256kbps
Data Format	MPD (Manchester, Bi-phase, etc)

### LED

Video Signal Indication (Presence)	Green LED lit
Data In / Out	Red/Green LED lit
Optical Carrier Detected	Yellow / Active
Power	Red / On

### Connectors

Video Input / Output	BNC
Optical Input / Output	ST (standard), FC (optional)
Data Input / Output	7-pin screw terminal
Power	2-pin screw terminal

### Electrical and Mechanical

Power	12VDC(24VAC*)@ 2.4W
Dimensions(WxHxD)	36.2 x 35 x 101(118*)mm(Max)
Shipping Weight	0.12kg

### Environmental

Operating Temp	-40°C to +75°C
Storage Temp	-40°C to +85°C
Relative Humidity	0 to 95% non-condensing
MTBF	> 100,000 hours

\* Specifications of FTD110DBMicro24 Models

## Ordering Information

Fiber Type	Part Number	Description	Wavelengths (nm)	Optical Power Budget (dB)	Max. Distance (Km)
Multi-mode (62.5/125µm)	<b>FTD110DBMicro-SMT</b>	Minitype 1-ch Video Transmitter with 1-ch bidirectional Data Transceiver	1310   1550	23	4
	<b>FTD110DBMicro24-SMT</b>	Minitype 1-ch Video Transmitter with 1-ch bidirectional Data Transceiver (24VAC)			
	<b>FTD110DBMicro-SMR</b>	Minitype 1-ch Video Receiver with 1-ch bidirectional Data Transceiver			
Single-mode (9/125µm)	<b>FTD110DBMicro-SST</b>	Minitype 1-ch Video Transmitter with 1-ch bidirectional Data Transceiver	1310   1550	17	20
	<b>FTD110DBMicro24-SST</b>	Minitype 1-ch Video Transmitter with 1-ch bidirectional Data Transceiver (24VAC)			
	<b>FTD110DBMicro-SSR</b>	Minitype 1-ch Video Receiver with 1-ch bidirectional Data Transceiver			

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|--------------------|--|
| Options            | <ul style="list-style-type: none"> <li>ST type connector is standard. For FC type, specify "F" in the suffix. E.g. FMT.</li> <li>Please feel free to consult factory if longer transmission distance is required.</li> </ul> |
| Power Adaptor      | <ul style="list-style-type: none"> <li>Power adaptor is included.</li> </ul>   |
| Rack Mount Chassis | <ul style="list-style-type: none"> <li>MR-C10 is to be purchased separately. Please refer to accessories section for details.</li> </ul>   |

- Notes:
- Transmission distance will suffer if additional losses are introduced by the optical connectors, fusions, splices and the fibers within the network.
  - Operating distance of multimode is limited by the characteristics of the fiber bandwidth.
  - Power adaptor is manufactured by third party and is supplied with fitted screw - terminal output cables.
  - Please feel free to consult factory for any special requirement and customization.



OT Systems Ltd., November 2013

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