

## VersiVision - 10-Bit Fiber Optic Video

### FVTM8B0xT - Transmitter FVRM8B0xT - Receiver

- 8-Channels Digitally Encoded Video
- 2-Channels Bi-Directional Data

#### Product Features

- 10-Bit Digitally Encoded Video Transmission
- Supports RS-485, RS-422, RS-232
- NTSC, PAL or SECAM Video Compatible
- Transmit up to 30km without Optical Attenuation
- Wide Optical Dynamic Range
- No EMI, RFI, Cross Talk or Video Distortion
- No Electrical or Optical Adjustments Required
- LED Indicators for Instant System Monitoring
- Standalone or Rack Mount with the FVC14 Chassis



#### Product Description

The VERSITRON **VersiVision** Series video/data transmitter and receiver multiplexers support eight channels of 10-bit digitally encoded broadcast quality video and two channels of bi-directional data over one multi-mode or single-mode optical fiber. The devices are directly compatible with NTSC, PAL, and SECAM camera systems and support RS-485, RS-422, and RS-232 data protocols. These units are typically used in applications where the camera can transmit *and* receive data. Plug and Play design ensures adjustment-free installation and operation, and optical adjustments are never required. LED indicators are provided to instantly monitor the system operating status. A typical installation utilizes a *transmitter* unit at the camera end of the link, connected via a single fiber optic cable, to a *receiver* unit at the monitoring end of the link. Devices are available for either standalone or rack-mount installation with the FVC14 Chassis.

#### Product Models

Model	Function	Connector	Fiber Cable	Wavelength	Max Distance
FVTM8B03T	Transmitter	ST Simplex	MM	850/1310nm	3 Km
FVRM8B03T	Receiver	ST Simplex	MM	850/1310nm	3 Km
FVTM8B04T	Transmitter	SC Simplex	MM	850/1310nm	3 Km
FVRM8B04T	Receiver	SC Simplex	MM	850/1310nm	3 Km
FVTM8B05T	Transmitter	SC Simplex	SM	1310/1550nm	30 Km
FVRM8B05T	Receiver	SC Simplex	SM	1310/1550nm	30 Km
FVTM8B06T	Transmitter	FC Simplex	SM	1310/1550nm	30 Km
FVRM8B06T	Receiver	FC Simplex	SM	1310/1550nm	30 Km

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### Technical Specifications

#### VIDEO

Video Input:	1 Volt pk-pk (75 Ohms)
Input/Output Channels:	8
Bandwidth:	6.5 MHz
Bit Resolution:	10 - Bit
Differential Gain:	< 1%
Differential Phase:	< 0.6°
Tilt:	< 1%
S/N Ratio:	> 67dB (Weighed)
Sampling Rate:	15.36 MHz

#### DATA

Data Interface:	RS-485, RS-422, RS-232
Data Channels:	2
Data Rate:	100Kbps
Bit Error Rate:	10 <sup>-9</sup>

#### WAVELENGTH

Multi-Mode:	850/1310nm
Single-Mode:	1310/1550nm

#### OPTICAL EMITTER

Laser Diode	
Number of Fibers:	1

#### CONNECTORS

Optical:	SC, ST (FC Optional)
Video:	BNC
Data:	Terminal Block with Screws

#### GENERAL

Power Supply:	100-240VAC
Dimensions:	8.23 x 7.95 x 7.16 Inches
Construction:	Aluminum
Finish:	Paint
MTBF:	> 100,000 Hours
Operating Temperature:	-30° C to +50° C
Storage Temperature:	-40° C to +85° C
Relative Humidity:	0% to 95% (non-condensing)

### Typical Installation

