

VersiVision - Fiber Optic Video

FDVT1AAxA-AE - Transmitter
FDVR1AAxA-AE - Receiver



Product Features

- 8-Bit Uncompressed Video Transmission
- 24-Bit Digitally Encoded Audio
- 10/100Base Ethernet
- NTSC, PAL or SECAM Video Compatible
- RS-485 Data (RS-232 or RS-422 Optional)
- Transmit up to 30km without Optical Attenuation
- WDM Technology for Higher Reliability
- No EMI, RFI, Cross Talk or Video Distortion
- No Electrical or Optical Adjustments Required
- LED Indicators for Instant System Monitoring
- Stand-Alone or Rack-Mount in FVC18 Chassis
- Hot-Pluggable into the FVC18 Chassis



Product Description

The VERSITRON **VersiVision** Series video transmitters and receivers support 1-channel of 8-bit digitally encoded broadcast quality video + 1-channel of bi-directional data + 1-channel of bi-directional audio + 1-channel of bi-directional contact-closure + 1-channel of 10/100Base Ethernet over one multi-mode or single-mode optical fiber. The devices are directly compatible with NTSC, PAL, and SECAM camera systems. 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 stand-alone or rack-mount installation with the FVC18 18-Slot Chassis.

Product Models

Model	Function	Connector	Fiber Cable	Wavelength	Max Distance
FDVT1AA3A-AE	Transmitter	ST Simplex	MM	850/1310nm	3 Km
FDVR1AA3A-AE	Receiver	ST Simplex	MM	850/1310nm	3 Km
FDVT1AA5A-AE	Transmitter	ST Simplex	SM	1310/1550nm	30 Km
FDVR1AA5A-AE	Receiver	ST Simplex	SM	1310/1550nm	30 Km

ST-SC adapters are available for applications with SC fiber connectors.

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Technical Specifications

VIDEO

Video Input:	2 Volt pk-pk (75 Ohms)
Input/Output Channels:	1
Bandwidth:	5 Hz - 8MHz
Bit Resolution:	8 - Bit
Differential Gain:	< ±1%
Differential Phase:	< ±1°
Tilt:	< 1%
S/N Ratio:	60dB (Weighted)

WAVELENGTH

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

OPTICAL EMITTER

Laser Diode	
Number of Fibers:	1

DATA

Data Interface:	RS-485*
Data Rate:	Up to 300 Kbps
Data Channels:	(1) Bi-Directional
Bit Error Rate:	10 ⁻⁹
	*RS-232 or RS-422 Optional

CONTACT CLOSURE

Contact Closure:	24VDC, 0.5A (Normally Open)
	125VAC, 0.1A (Normally Open)

AUDIO

Audio Channels:	(1) Bi-Directional
Audio Impedance:	600 Ohms
Input/Output Voltage:	2.0Vp-p
Frequency Response:	10Hz-20KHz
Bit Resolution:	24-bit
S/N Ratio:	>95db (Weighted)

ETHERNET

Data Rate:	10/100 Mbps
Data Channels:	1

CONNECTORS

Optical:	ST
Video:	BNC
Data/Audio/CC:	Screw Terminal Strip
Ethernet:	Shielded RJ-45

GENERAL

Power Supply:	5VDC, 2A
Dimensions:	5.98 x 5.12 x 1.13 Inches
MTBF:	> 100,000 Hours
Operating Temperature:	-35° C to +65° C
Storage Temperature:	-45° C to +85° C
Relative Humidity:	0% to 95% (non-condensing)



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Wiring Diagram

FDVT1AAxA-AE TRANSMITTER

FDVR1AAxA-AE RECEIVER

