

## **VersiVision** - High Definition Fiber Optic Video

- HD-CVI
- AHD
- HD-TVI

### **Product Features**

- Supports:
  - HD-CVI - High Definition Composite Video Interface
  - AHD - Analog High Definition
  - HD-TVI - High Definition Transport Video Interface
- 8-Bit Uncompressed Video Transmission
- Digitally Encoded
- NTSC, PAL or SECAM Video Compatible
- Simplex or Full-Duplex Data
- 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** High Definition video transmitters and receivers support 1, 2, or 4-channels of 8-bit digitally encoded HD-CVI, ADH, or HD-TVI video. The video + data versions also support 1-channel of bi-directional data over one multi-mode or single-mode optical fiber. The optimized optical modules are compatible with 1280H/25F, 1280H/30F, 1280H/50F, and 1280H/60F to ensure the highest performance for the most demanding applications. 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.

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## Technical Specifications

### VIDEO

Video Input:	0.6 ~ 2.0 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 <sup>-9</sup>
	*RS-232 or RS-422 Optional

### DATA

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

### CONNECTORS

Optical:	ST
Video:	BNC
Data Contact:	Screw Terminal Strip

### GENERAL

Power Supply:	5VDC, 2A
Dimensions (Inches):	1-Channel Units: 4.33 x 4.09 x 1.10 2-Channel Video Only: 4.33 x 4.09 x 1.10 2-Channel w/ Data: 5.98 x 5.12 x 1.13 4-Channel Units: 5.98 x 5.12 x 1.13
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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### Product Models - HD-CVI Video Only

Model	Function	Connector	Fiber Cable	Wavelength	Max Distance
HDCVIT1003	1-Channel Transmitter	ST Simplex	MM	1310nm	2 Km
HDCVIR1003	1-Channel Receiver	ST Simplex	MM	1310nm	2 Km
HDCVIT1005	1-Channel Transmitter	ST Simplex	SM	1310nm	30 Km
HDCVIR1005	1-Channel Receiver	ST Simplex	SM	1310nm	30 Km
HDCVIT2003	2-Channel Transmitter	ST Simplex	MM	1310nm	2 Km
HDCVIR2003	2-Channel Receiver	ST Simplex	MM	1310nm	2 Km
HDCVIT2005	2-Channel Transmitter	ST Simplex	SM	1310nm	30 Km
HDCVIR2005	2-Channel Receiver	ST Simplex	SM	1310nm	30 Km
HDCVIT4003	4-Channel Transmitter	ST Simplex	MM	1310nm	1 Km
HDCVIR4003	4-Channel Receiver	ST Simplex	MM	1310nm	1 Km
HDCVIT4005	4-Channel Transmitter	ST Simplex	SM	1310nm	30 Km
HDCVIR4005	4-Channel Receiver	ST Simplex	SM	1310nm	30 Km

### Product Models - AHD Video Only

Model	Function	Connector	Fiber Cable	Wavelength	Max Distance
AHDT1003	1-Channel Transmitter	ST Simplex	MM	1310nm	2 Km
AHDR1003	1-Channel Receiver	ST Simplex	MM	1310nm	2 Km
AHDT1005	1-Channel Transmitter	ST Simplex	SM	1310nm	30 Km
AHDR1005	1-Channel Receiver	ST Simplex	SM	1310nm	30 Km
AHDT2003	2-Channel Transmitter	ST Simplex	MM	1310nm	2 Km
AHDR2003	2-Channel Receiver	ST Simplex	MM	1310nm	2 Km
AHDT2005	2-Channel Transmitter	ST Simplex	SM	1310nm	30 Km
AHDR2005	2-Channel Receiver	ST Simplex	SM	1310nm	30 Km
AHDT4003	4-Channel Transmitter	ST Simplex	MM	1310nm	1 Km
AHDR4003	4-Channel Receiver	ST Simplex	MM	1310nm	1 Km
AHDT4005	4-Channel Transmitter	ST Simplex	SM	1310nm	30 Km
AHDR4005	4-Channel Receiver	ST Simplex	SM	1310nm	30 Km

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

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### Product Models - HD-TVI Video Only

Model	Function	Connector	Fiber Cable	Wavelength	Max Distance
HDTVIT1003	1-Channel Transmitter	ST Simplex	MM	1310nm	2 Km
HDTVIR1003	1-Channel Receiver	ST Simplex	MM	1310nm	2 Km
HDTVIT1005	1-Channel Transmitter	ST Simplex	SM	1310nm	30 Km
HDTVIR1005	1-Channel Receiver	ST Simplex	SM	1310nm	30 Km
HDTVIT2003	2-Channel Transmitter	ST Simplex	MM	1310nm	2 Km
HDTVIR2003	2-Channel Receiver	ST Simplex	MM	1310nm	2 Km
HDTVIT2005	2-Channel Transmitter	ST Simplex	SM	1310nm	30 Km
HDTVIR2005	2-Channel Receiver	ST Simplex	SM	1310nm	30 Km
HDTVIT4003	4-Channel Transmitter	ST Simplex	MM	1310nm	1 Km
HDTVIR4003	4-Channel Receiver	ST Simplex	MM	1310nm	1 Km
HDTVIT4005	4-Channel Transmitter	ST Simplex	SM	1310nm	30 Km
HDTVIR4005	4-Channel Receiver	ST Simplex	SM	1310nm	30 Km

### Product Models - HD-CVI Video + Bi-Directional Data

Model	Function	Connector	Fiber Cable	Wavelength	Max Distance
HDCVIT1A03	1-Channel Transmitter	ST Simplex	MM	850/1310nm	2 Km
HDCVIR1A03	1-Channel Receiver	ST Simplex	MM	850/1310nm	2 Km
HDCVIT1A05	1-Channel Transmitter	ST Simplex	SM	1310/1550nm	30 Km
HDCVIR1A05	1-Channel Receiver	ST Simplex	SM	1310/1550nm	30 Km
HDCVIT2A03	2-Channel Transmitter	ST Simplex	MM	850/1310nm	2 Km
HDCVIR2A03	2-Channel Receiver	ST Simplex	MM	850/1310nm	2 Km
HDCVIT2A05	2-Channel Transmitter	ST Simplex	SM	1310/1550nm	30 Km
HDCVIR2A05	2-Channel Receiver	ST Simplex	SM	1310/1550nm	30 Km
HDCVIT4A03	4-Channel Transmitter	ST Simplex	MM	850/1310nm	1 Km
HDCVIR4A03	4-Channel Receiver	ST Simplex	MM	850/1310nm	1 Km
HDCVIT4A05	4-Channel Transmitter	ST Simplex	SM	1310/1550nm	30 Km
HDCVIR4A05	4-Channel Receiver	ST Simplex	SM	1310/1550nm	30 Km

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### Product Models - AHD Video + Bi-Directional Data

Model	Function	Connector	Fiber Cable	Wavelength	Max Distance
AHDT1A03	1-Channel Transmitter	ST Simplex	MM	850/1310nm	2 Km
AHDR1A03	1-Channel Receiver	ST Simplex	MM	850/1310nm	2 Km
AHDT1A05	1-Channel Transmitter	ST Simplex	SM	1310/1550nm	30 Km
AHDR1A05	1-Channel Receiver	ST Simplex	SM	1310/1550nm	30 Km
AHDT2A03	2-Channel Transmitter	ST Simplex	MM	850/1310nm	2 Km
AHDR2A03	2-Channel Receiver	ST Simplex	MM	850/1310nm	2 Km
AHDT2A05	2-Channel Transmitter	ST Simplex	SM	1310/1550nm	30 Km
AHDR2A05	2-Channel Receiver	ST Simplex	SM	1310/1550nm	30 Km
AHDT4A03	4-Channel Transmitter	ST Simplex	MM	850/1310nm	1 Km
AHDR4A03	4-Channel Receiver	ST Simplex	MM	850/1310nm	1 Km
AHDT4A05	4-Channel Transmitter	ST Simplex	SM	1310/1550nm	30 Km
AHDR4A05	4-Channel Receiver	ST Simplex	SM	1310/1550nm	30 Km

### Product Models - HD-TVI Video + Bi-Directional Data

Model	Function	Connector	Fiber Cable	Wavelength	Max Distance
HDTVIT1A03	1-Channel Transmitter	ST Simplex	MM	850/1310nm	2 Km
HDTVIR1A03	1-Channel Receiver	ST Simplex	MM	850/1310nm	2 Km
HDTVIT1A05	1-Channel Transmitter	ST Simplex	SM	1310/1550nm	30 Km
HDTVIR1A05	1-Channel Receiver	ST Simplex	SM	1310/1550nm	30 Km
HDTVIT2A03	2-Channel Transmitter	ST Simplex	MM	850/1310nm	2 Km
HDTVIR2A03	2-Channel Receiver	ST Simplex	MM	850/1310nm	2 Km
HDTVIT2A05	2-Channel Transmitter	ST Simplex	SM	1310/1550nm	30 Km
HDTVIR2A05	2-Channel Receiver	ST Simplex	SM	1310/1550nm	30 Km
HDTVIT4A03	4-Channel Transmitter	ST Simplex	MM	850/1310nm	1 Km
HDTVIR4A03	4-Channel Receiver	ST Simplex	MM	850/1310nm	1 Km
HDTVIT4A05	4-Channel Transmitter	ST Simplex	SM	1310/1550nm	30 Km
HDTVIR4A05	4-Channel Receiver	ST Simplex	SM	1310/1550nm	30 Km

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