

# Technical Datasheet

---

## 4 Channels Forward HD TVI/CVI/AHD/CVBS Video to Fiber Converter



### Introduction

HD TVI/CVI/AHD/CVBS 4 in 1 Video to Fiber Converter can simultaneously transmit 4 channels HD TVI/CVI/AHD/CVBS video over one single-mode optical fiber. Electronic and optical adjustments are never required. LED indicators are provided for instantly monitoring system status. Devices are available for either standalone or rack-mount installation, which is suitable for different working environment. HD TVI/CVI/AHD/CVBS Video to fiber converters adopt the advanced uncompressed HD composite video and high velocity digital optical transmission technologies which convert the composite signals to optical signals to achieve long distance for the HD CCTV installation.

### Features

- Non-compression coding technology
- Automatically identify formats of input videos
- Support transmission of HD TVI/CVI/AHD/CVBS signal and controlling data simultaneously through fiber optic cable
- DC 5V power supply
- Support 720p/25、720p/30、720p/50、720p/60、1080p/25、1080p/30 videos etc
- Through LED indicators to inform its functional mode
- Industrial wide range of operational temperature
- Plug and play, simple installation

### Application

- ◇ City traffic monitoring system
- ◇ Public security, safe city monitoring system
- ◇ Highway security protection, charging system
- ◇ Building, campus monitoring net
- ◇ Industrial monitoring (airport, chemical industrial, steel, oil, railway, water conservancy, mine, etc)
- ◇ Military monitoring (storehouse, frontier defense, guard, nation defense, etc)
- ◇ electric power, oilfield, television program transmission system
- ◇ Gymnasium (live video, audio transmission)

# Technical Datasheet

## HD TVI/CVI/AHD/CVBS 720P/960P/1080P Series Connection Diagram



### Technical Specification

Feature		Description
Optical	Fiber Type	Single-mode fiber (9/125um)
	Fiber Connector	FC
	Distance	20KM (Single-mode fiber)
	Wavelength	Transmitter:T1310nm, R1550nm.
		Receiver:T1550nm,R1310nm.
	Fiber Power	-9~ -5dBm
Rx Sensitivity	-24dBm	
Video	Video Interface Number	4 channels
	Physical Interface	BNC

# Technical Datasheet

	Tx Input level	>500mVp-p
	Rx Output level	1-1.2Vp-p
	Bandwidth of Video	50M(720P) 100M(1080P)
	Differential Phase	≤ 2
	Differential Gain	≤ 2%
	Input/Output Impedance	75 Ω
	Surge Protection	10/700us:(1-1.5kv)
	Sampling Digit	10 Bit
	Sampling Frequency	60Mhz
Data	Physical Interface	The industry standard connecting terminal
	Interface Signal	RS485/RS422/RS232/Manchester
	Baud Rate	0-400Kbps
	BER	< 10 <sup>-9</sup>
	Operation Mode	Full duplex / half duplex
Environmental Demand	Environmental Temperature	-30°C~+75°C
	Storage Environment	-40°C~+85°C
	Relative Humidity	0-95% ( no condensation)
	Mean Time Between Failures(MTBF)	≥100 000 hours
	EPS	DC5V

## Order Information

Model No.	Description
TVI841D	4 x TVI/CVI/AHD/CVBS forward video + 1 x return RS485 data, SM FC
Note:	
1. Power supply provided by user or ordered additionally	

# Technical Datasheet

2. FC connector as default, SC/ST/LC as request

Remark: To meet the needs of our customers and help them to realize their projects, we also can manufacture the products according to customers requirements.