

## High-Definition Analog Video TVI/CVI/AHD to Fiber Converter



### Introduction

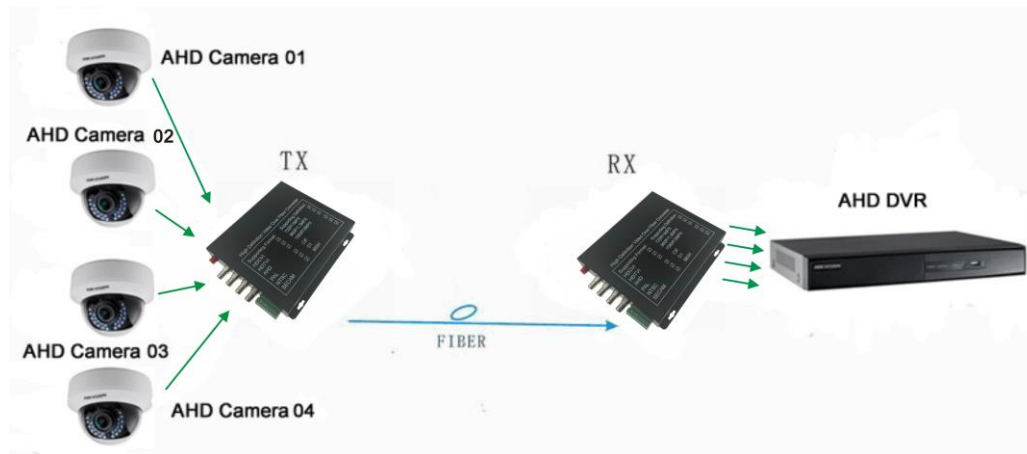
Our 1-Ch TVI/CVI/AHD TO Fiber Converters is universal type supporting High Definition Analog video format HD-TVI / HD-CVI / AHD , can simultaneously transmit 1 channels video and 1-ch RS485 over one core multimode or single-mode optical fiber. It also supports the regular analog video format such as PAL / NTSC /SECAM , it is a kind of universal fiber transmission solution / product for CCTV analog video/data signals . Devices are available for either standalone or rack-mount installation, which is suitable for different working environment . Electronic and optical adjustments are never required. LED indicators are provided for instantly monitoring system status.

### Features

- Lossless non-compression real time transmission.
- Automatically identify formats of input video : AHD/TVI/CVI/PAL/NTSC/SECAM
- Support 720P/25/30/50Hz , 960P/25/30Hz,1080P/30Hz

- Advanced lightning protection design ,support 5.7KV lightning protection
- Through LED indicators to inform its functional mode
- Industrial wide range of operational temperature
- Stand-alone or Rack-mounted, simple installation.

## AHD TO Fiber Converter System connection diagram



## Technical Specification

### Optics:

Wavelength	WDM:1310nm/1550nm
Output Power	-8~3dBm
Optic fiber	50/125u multimode, 62.5/125u multimode, 9/125u single mode
Rx sensitivity	-26dBm
Optical connector	FC、ST、SC (optional)
Distance	0~550M (MM) / 0~80KM (SM) (Default distance is 20Km)

### Video:

Number of Channels	1
Input/output impedance	75 Ohm (unbalance)
Standard video input/output voltage	1.0Vp-p

Video Bandwidth	50MHz
Sampling Bandwidth	8bit
Sampling Frequency	108MHz
Signal to noise ratio	>67dB
Rise and Fall time	<0.8ns
Optical Signal Intrinsic Jitter	<0.2 UI
Differential Gain	< $\pm 1.5\%$
Differential Phase	< $\pm 1^\circ$
Connector	BNC
Supporting video pixel	1280(H)x720(V)@30Hz/1MPX 1280(H)x720(V)@50Hz/1MPX 1280(H)x960(V)@30Hz/1.3MPX 1920(H)x1080(V)@30Hz/2MPX

#### Data:

Protocol	RS485 (RS232/RS422 Optional)
Number of channels	1
Connector	5pins Terminal Blocks
Data Rate	0-200Kbps
Directions	Default :Simplex from Rx to Tx (BIDI duplex optional)

#### Mechanical Structure & Environment

Power	DC5V 2A
Power Consumption	$\leq 6W$
Working Temperature	-15°C ~65°C
Storage Temperature	-40°C ~85°C
Relative Humidity	5%~95% ( no condensation)
MTBF	$\geq 100000$ Hours

## Ordering information

Model Number	Product Configuration	Remark	Fiber Mode	Wavelengths	Transmission Distance
TS-AHD-1000T/R	1Ch Forward AHD Video 1080P	FC/SC/ST	Single-mode	1310 nm	20Km
TS-AHD-1100T/R	1Ch Forward AHD Video 1080P +1 Ch Reverse Data	FC/SC/ST	Single-mode	WDM 1310/1550 nm	20Km

## Packing information

Dimensions of products (Pcs per Tx or Rx)					
Module name	Configuration	Long (mm)	Wide(mm)	High(mm)	Volume(mm <sup>3</sup> )
TS-AHD-1000T/R	1-Ch video 1080P	108	102	27	297432
TS-AHD-1100T/R	1-Ch video 1080P + 1-Ch RS485 data	108	102	27	297432
Dimensions of packing box(pair/ Tx + Rx)					
Module name	Configuration	Long (mm)	Wide(mm)	High(mm)	Volume(mm <sup>3</sup> )
TS-AHD-1000T/R	1-Ch video 1080P	301	247	61	4535167
TS-AHD-1100T/R	1-Ch video 1080P + 1-Ch RS485 data	301	247	61	4535167
Shipping weight (pair /Tx+Rx & power adaptors & packages)					
Module name	Configuration	weight (kg)		Package type	
TS-AHD-1000T/R	1-Ch video 1080P	0.95		Carton box	
TS-AHD-1100T/R	1-Ch video 1080P + 1-Ch RS485 data	1.0		Carton box	

## Remark :

- Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels.
- Maximum transmission distance is also limited by fiber bandwidth.
- Power adapter for stand-alone units is manufactured by third party .Power adapter included US, European, UK or Australian power plug.
- Please feel free to contact factory for any special requirement and customization