

# Hi-Definition Analog Video up to 5MPX (2560 x 1920@25fps) TVI/CVI/AHD to Fiber Converter



# Introduction

16-Ch TVI/CVI/AHD to Fiber Converters is universal transceivers which supporting High Definition Analog video format HD-TVI / HD-CVI / AHD up to 5MPX (2560 x 1920@25fps), can simultaneously transmit 16 channels video and 1-ch RS485 over one core 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/25/30/50fps@1MPX,

960P/25/30fps@1.3MPX,

1080P/30fps@2MPX,

2048x1536/25fps@3MPX,

2560x1440/25fps@4MPX

2560x1920/25fps@5MPX

•Advanced lightning protection design, Data interface (terminal blocks) support 4KV lightning protection

•Through LED indicators to inform its functional mode

•Wide range of operating temperature -15 °C to 60 °C

•Stand-alone or Rack-mounted, simple installation.

# **Technical Specification**

## Optics:

Wavelength	CWDM:1310nm/1550nm/1470nm/1490nm/1570nm			
Output Power	-6~-1dBm			
Optic fiber	9/125u single mode			
Rx sensitivity	-23dBm			
Optical connector	FC、ST、SC (optional)			
Distance	0~550M (MM) /0~80KM (SM) (Regular distance is SM 20Km)			

#### Video:

Number of Channels	16		
Input/output impedance	75 Ohm (unbalance)		
Standard video input/output voltage	1.0Vp-p		

Video Bandwidth 50MHz Sampling Bandwidth 8bit 100MHz Sampling Frequency >67dB Signal to noise ratio Rise and Fall time <0.8ns Optical Signal Intrinsic Jitter <0.2 UI Differential Gain < ±1.5% Differential Phase < ±1° Connector **BNC** 

1280(H)x720(V)@30fps/1MPX

1280(H)x720(V)@50fps/1MPX

1280(H)x960(V)@30fps/1.3MPX

1920(H)x1080(V)@25fps/2MPX

2408(H)x1536(V)@25fps/3MPX

2560(H)x1440(V)@25fps/4MPX

2560(H)x1920(V)@25fps/5MPX

#### Data:

Supporting video pixel

Protocol	RS485 (RS232/RS422 Optional)				
Number of channels	1				
Connector	9pins Terminal Blocks				

Data Rate

0-200Kbps

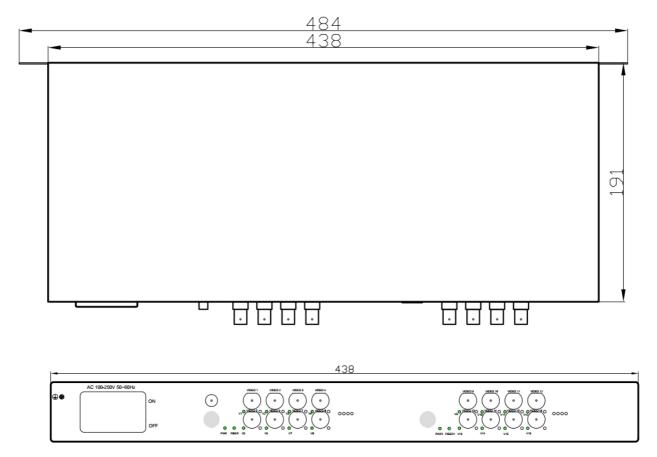
Directions

Default:Simplex from Rx to Tx (BIDI duplex optional)

#### **Mechanical Structure & Environment**

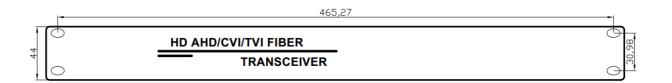
Power	DC5V 6A (Internal)		
Power Consumption	≤15W		
Working Temperature	-15°C ~60°C		
Storage Temperature	-40°C ~85°C		
Relative Humidity 5%~95% (no condensation)			
MTBF	≥ 100000Hours		

# **Mechanical diagrams**



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## Front panel of ADV401-16HDTVI/CVI/AHD-T/R-5



## Back panel of ADV401-16HDTVI/CVI/AHD-T/R-5

# **Ordering information**

Model Number	Product Configuration	F/O connector	Fiber Mode	Wavelengths	Transmission Distance
ADV401-16HDTVI/CV I/AHD-T/R-5	16-Ch video 5MPX (2560x1920@25fps)	FC simplex	Single-mode	CWDM 1310/1470/149 0/1550nm	20Km
ADV401-16HDTVI/CV I/AHD1d-T/R-5	16-Ch video 5MPX (2560x1920@25fps) + 1-Ch RS485 data	FC simplex	Single-mode	CWDM 1310/1550/147 0/1490/1570 nm	20Km

# **Packing information**

	Dimensions of products (Pcs per Tx or Rx)				
Module name	Configuration	Long (mm)	Wide(mm)	High(mm)	Volume(mm³

ADV401-16HDTVI/CVI/AHD-T/R-16-Ch video 438 191 44 3680952 5 5MPX (2560x1920@25f ps) ADV401-16HDTVI/CVI/AHD1d-T/ 16-Ch video 438 191 44 3680952 R-5 5MPX (2560x1920@25f ps) + 1-Ch RS485 data Dimensions of packing box(pair/ Tx + Rx) Module name Configuration Long (mm) Wide(mm) High(mm) Volume(mm<sup>3</sup> ADV401-16HDTVI/CVI/AHD-T/R-16-Ch video 542 287 185 28777490 5 5MPX (2560x1920@25f ps) 542 287 185 28777490 ADV401-16HDTVI/CVI/AHD1d-T/ 16-Ch video R-5 5MPX (2560x1920@25f ps) + 1-Ch RS485 data

Shipping weight (pair /Tx+Rx & power adaptors & packages)					
Module name	Configuration	weight (kg)	Package type		
ADV401-16HDTVI/CVI/AHD-T/R-	16-Ch video	5.5	Carton box		
5	5MPX				
	(2560x1920@25f				
	ps)				
ADV401-16HDTVI/CVI/AHD1d-T/	16-Ch video	6.0	Carton box		
R-5	5MPX				
	(2560x1920@25f				
	ps) + 1-Ch RS485				
	data				

## 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.