

## VCD-0XXFST/SR

High Definition (HD) CCTV F.O Converter, Single mode,  
Single Fiber Converter, 1080P Resolution



### ❖ Overview

VCD-0XXFST/SR Series products digital coaxial high-definition optical video converter (hereinafter referred to as the coaxial HD optical transmitter and receiver) is analog HD video signal HD-TVI, HD-CVI, HD-AHD turn optical fiber transmission of high speed optical fiber transmission products. Coaxial HD optical video converter integrates advanced high-speed optical fiber communication technology and digital video technology and data communication technology, and the high reliability of the large scale application specific integrated circuit and the surface mount technology, applied to one of the remote high-resolution real-time video monitoring transmission advanced products.

Optical Video Converter transceiver can transmit TVI, CVI and AHD over one single-mode optical fiber. Electronic and optical adjustments are never required. LED indicators are provided for instantly monitoring system status. Compatible with 1280X720P/30Hz, 1280PX960P/30Hz, 1280X 720P/50Hz, 1920X1080P/30HZ resolution pixel camera. Loss less non-compression real time transmission.

### ❖ Features

- ❖ Industrial design, surface mount technology (SMT)
- ❖ Advanced lightning protection design, support 6KV lightning protection.
- ❖ Digital optical fiber transmission platform, multi service platform with flexible configuration.
- ❖ Provide desktop plug-in frame, concentrated in 2 ways.
- ❖ Independent intellectual property rights of large scale integrated circuit core.
- ❖ Single fiber transmission, Optional 20KM, 40KM, 60KM long distance transmission
- ❖ Support 0.3 million standard video and 1280X720P/30Hz and 1280PX960P/30Hz and 1280X 720P/50Hz and 1920X1080P/30HZ resolution pixel camera, analog coaxial HD video, studio grade transmission quality
- ❖ Uncompressed video transmission real-time transmission, to guarantee the best effect
- ❖ Abundant LED indicators, diagnostic the working conditions
- ❖ Plug and Play, hot plugged support
- ❖ Compatible with TVI,CVI and AHD standard



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### ❖ Ordering Information

With Out DATA, **Compatible TVI & AHD & CVI**

Part Number	Description	Type	Fiber	Fiber Type
VCD-010FST	HD CCTV F.O Converter, Transmitter, 1 channel w/o Data, SM, 1080P, 20km	T	FC Simplex	Single Mode
VCD-010FSR	HD CCTV F.O Converter, Receiver, 1 channel w/o Data, SM, 1080P, 20km	R	FC Simplex	Single Mode
VCD-020FST	HD CCTV F.O Converter, Transmitter, 2 channel w/o Data, SM, 1080P, 20km	T	FC Simplex	Single Mode
VCD-020FSR	HD CCTV F.O Converter, Receiver, 2 channel w/o Data, SM, 1080P, 20km	R	FC Simplex	Single Mode
VCD-040FST	HD CCTV F.O Converter, Transmitter, 4 channel w/o Data, SM, 1080P, 20km	T	FC Simplex	Single Mode
VCD-040FSR	HD CCTV F.O Converter, Receiver, 4 channel w/o Data, SM, 1080P, 20km	R	FC Simplex	Single Mode
VCD-080FST	HD CCTV F.O Converter, Transmitter, 8 channel w/o Data, SM, 1080P, 20km	T	FC Simplex	Single Mode
VCD-080FSR	HD CCTV F.O Converter, Receiver, 8 channel w/o Data, SM, 1080P, 20km	R	FC Simplex	Single Mode

With DATA, **Compatible TVI & AHD & CVI**

Part Number	Description	Type	Fiber	Fiber Type
VCD-011FST	HD CCTV F.O Converter, Transmitter, 1 channel w/Data, SM, 1080P, 20km	T	FC Simplex	Single Mode
VCD-011FSR	HD CCTV F.O Converter, Receiver, 1 channel w/Data, SM, 1080P, 20km	R	FC Simplex	Single Mode
VCD-021FST	HD CCTV F.O Converter, Transmitter, 2 channel w/Data, SM, 1080P, 20km	T	FC Simplex	Single Mode
VCD-021FSR	HD CCTV F.O Converter, Receiver, 2 channel w/Data, SM, 1080P, 20km	R	FC Simplex	Single Mode
VCD-041FST	HD CCTV F.O Converter, Transmitter, 4 channel w/Data, SM, 1080P, 20km	T	FC Simplex	Single Mode
VCD-041FSR	HD CCTV F.O Converter, Receiver, 4 channel w/Data, SM, 1080P, 20km	R	FC Simplex	Single Mode
VCD-081FST	HD CCTV F.O Converter, Transmitter, 8 channel w/Data, SM, 1080P, 20km	T	FC Simplex	Single Mode
VCD-081FSR	HD CCTV F.O Converter, Receiver, 8 channel w/Data, SM, 1080P, 20km	R	FC Simplex	Single Mode



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## ❖ Specifications

Parameter	Specifications
<b>Optical</b>	
Wavelength	1310nm & 1470 ~1610nm
Output Power	-3 ~ -9 dBm
Receiver sensitivity	-26 dBm
Optic fiber	Single mode : 9/125 micron
Optical connector	FC Simplex
Distance	Single mode : 20 Km ( Optional : 40KM, 60KM)
<b>Data interface</b>	
Data Channel	1 Channel
Physical interface	Terminal Block, Screw Type
RS485 Rate	DC-115.2 Kbps
RS485 distance	0 – 1200 m
Physical protocol	RS485 (2,4wire), Bi-Directional Manchester/Biphase protocol
<b>Video</b>	
Input/output impedance	BNC 75Ω OHM (non-equilibrium)
Standard video input / output voltage	>500mVp-p / 1.0 Vp-p
Support camera pixels	0.3 million、 1 million、 1.3 million、 2 million
Video pixel (Standard clear video)	1280 (H) * 720 (V) /30Hz 1280 (H) * 720 (V) /50Hz 1280 (H) * 960 (V) /30Hz 1920 (H) * 1080 (V) /30Hz
Differential gain (10%-90% APL)	<±1% Type
Differential phase (10%-90% APL)	<±1% Type
Signal to noise ratio	>60dB (8Bit)
Connector physical interface	BNC
LED	LINK, Power, Video
Coaxial cable Distance	300 M
<b>Other</b>	
Working Power Supply	110V~240V AC Adaptive
Power adaptor	Auto sensed 110V~240V/AC
Power Consumption	<5W
Operating Temperature	-20°C ~ 70°C
Storage Temperature	-40°C ~ 85°C
Operating Humidity	0%~95% RH non-condensing
MTBF	≥50,000 Hours



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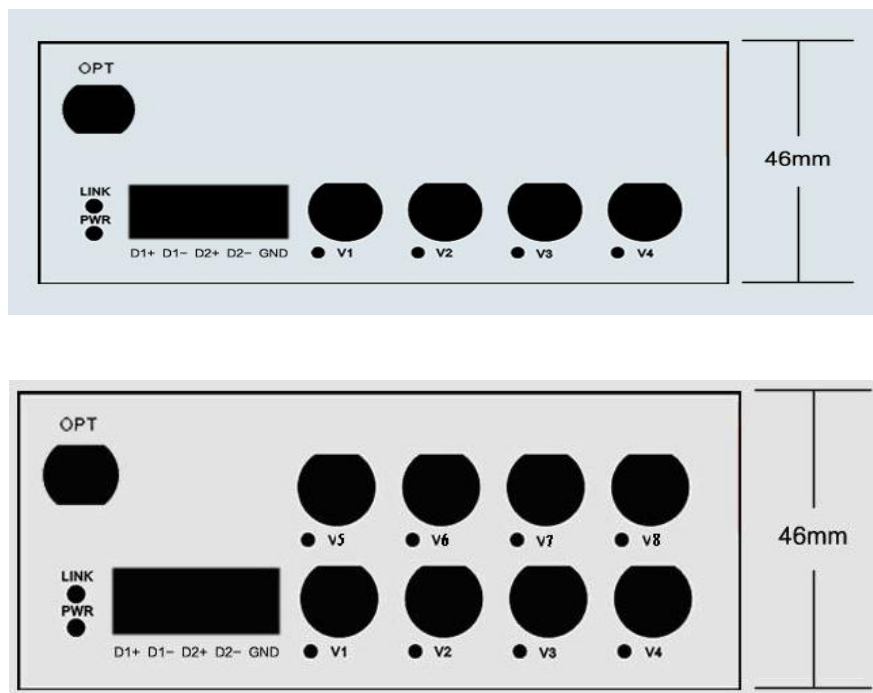


## ❖ Certification

<b>EMC</b> <b>(Electromagnetic Compatibility)</b>	EN 55032:2012/AC2013
	EN 55024:2010+A1:2015
	EN 61000-3-2:2014
	EN 61000-3-3:2013
<b>LVD</b> <b>(Low Voltage Directive)</b>	EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
<b>Emission</b>	FCC Part 15 Class B CE Approved

## ❖ Interface and LED indicator light function

Transmitter and receiver front panel has 1-8 BNC interface, 3-10 green indicators light and 1 data interface, as shown in the following figure.



Front panel interface: Video1-8 for BNC video interface, the transmitter on the BNC video interface for video input interface, video connector, the corresponding indicator lights on. The BNC video interface on the receiver is a video output interface, which is used for connecting a video recorder.

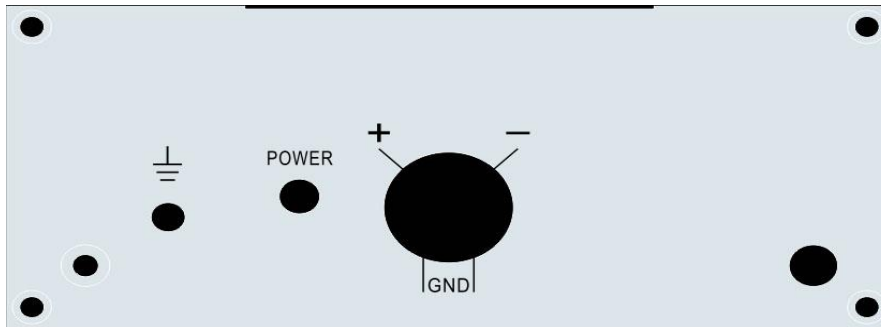


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Transmitter and receiver panel has a grounding screw and a aviation power seat interface and a data interface and a burring, as shown below.



Back panel interface for connecting screws for connection, in order to achieve better lightning anti-static effect; power supply interface is used for connecting external power adapter, data transmitter, and data ports for connecting a video recorder or keyboard; fiber optical interface for connecting optical fiber.

The front panel of the 3-10 indicators corresponding function as shown below:

Indicator light	description
Video1-8	Video 1-8 interface indicator
PWR	Power indicator light
LINK	Optical fiber connection indicator

At the transmitter, the PWR power indicator light, the indicating lamp into the work status indication, LED Video1- Video8 corresponding Video1-Video8 one way video, BNC socket at the insertion of active video and corresponding indicator of stability constant light. Otherwise, it is dark. In the absence of normal connection under dark or flicker with reverse data of optical transceiver, optical fiber is inserted, under normal and receiver connectivity, link connection indicator light.

At the receiver, the PWR indicator is on when the power is turned on, and the indicators are in the working status. After the fiber is inserted, the LINK indicator is on when the receiver is connected to the transmitter. If the connection is not normal, Flashes. LED Video1- Video8 corresponding to Video1- Video8 video, respectively, in the normal connection with the transmitter, the transmitter received over the video signal transmission, the corresponding indicator will light, otherwise dark.

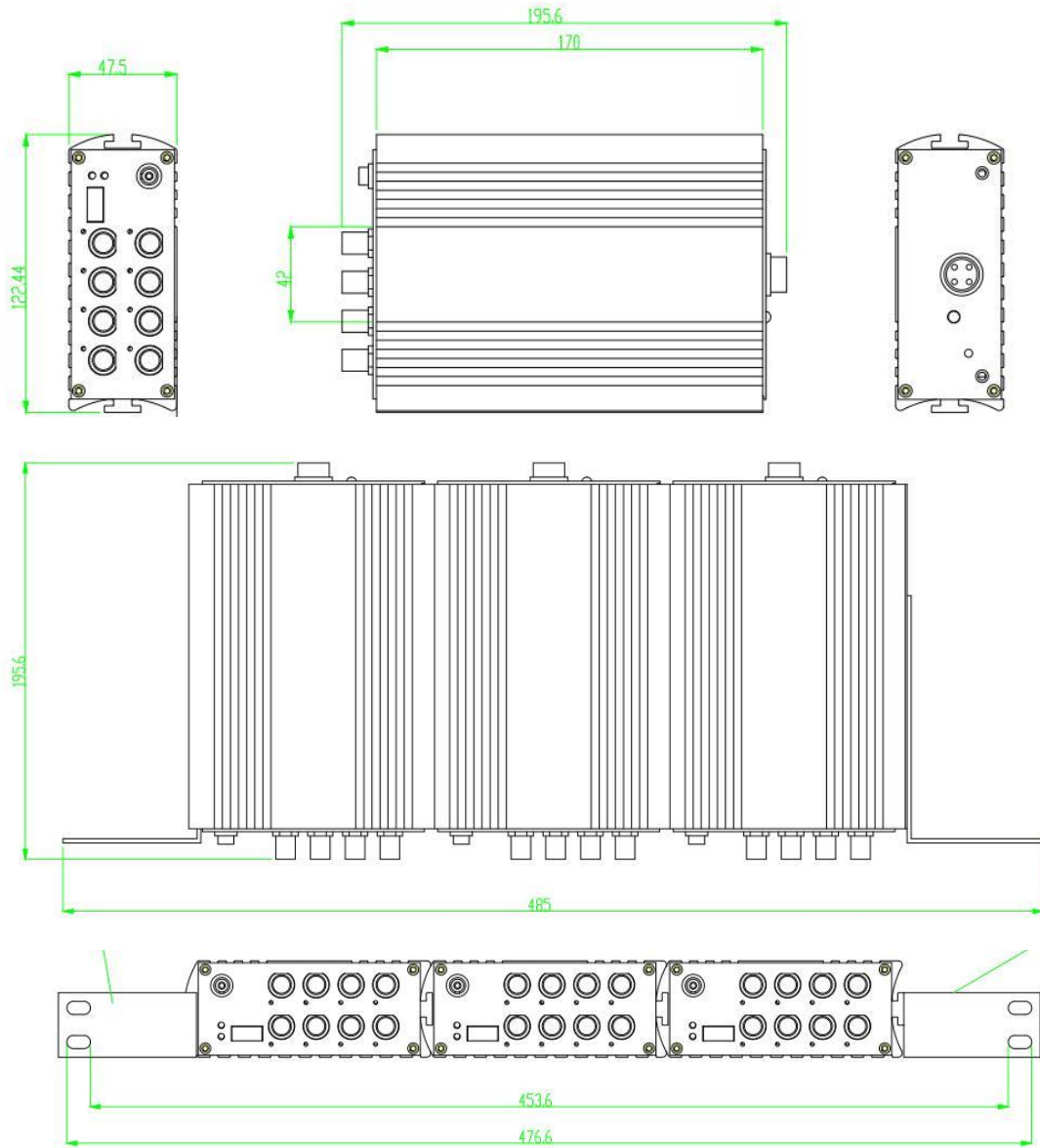


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## ❖ Product Structure (Unit : mm)



Specifications subject to change without notice. Revised 10/2016  
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