



1. 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. It is Compatible with 1280X720P/30Hz, 1280PX960P/30Hz, 1280X720P/50Hz, 1920X1080P/30HZ resolution pixel camera. Loss less non-compression real-time transmission.

2. 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 1280X720P/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

3. Ordering Information

For without 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

For 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

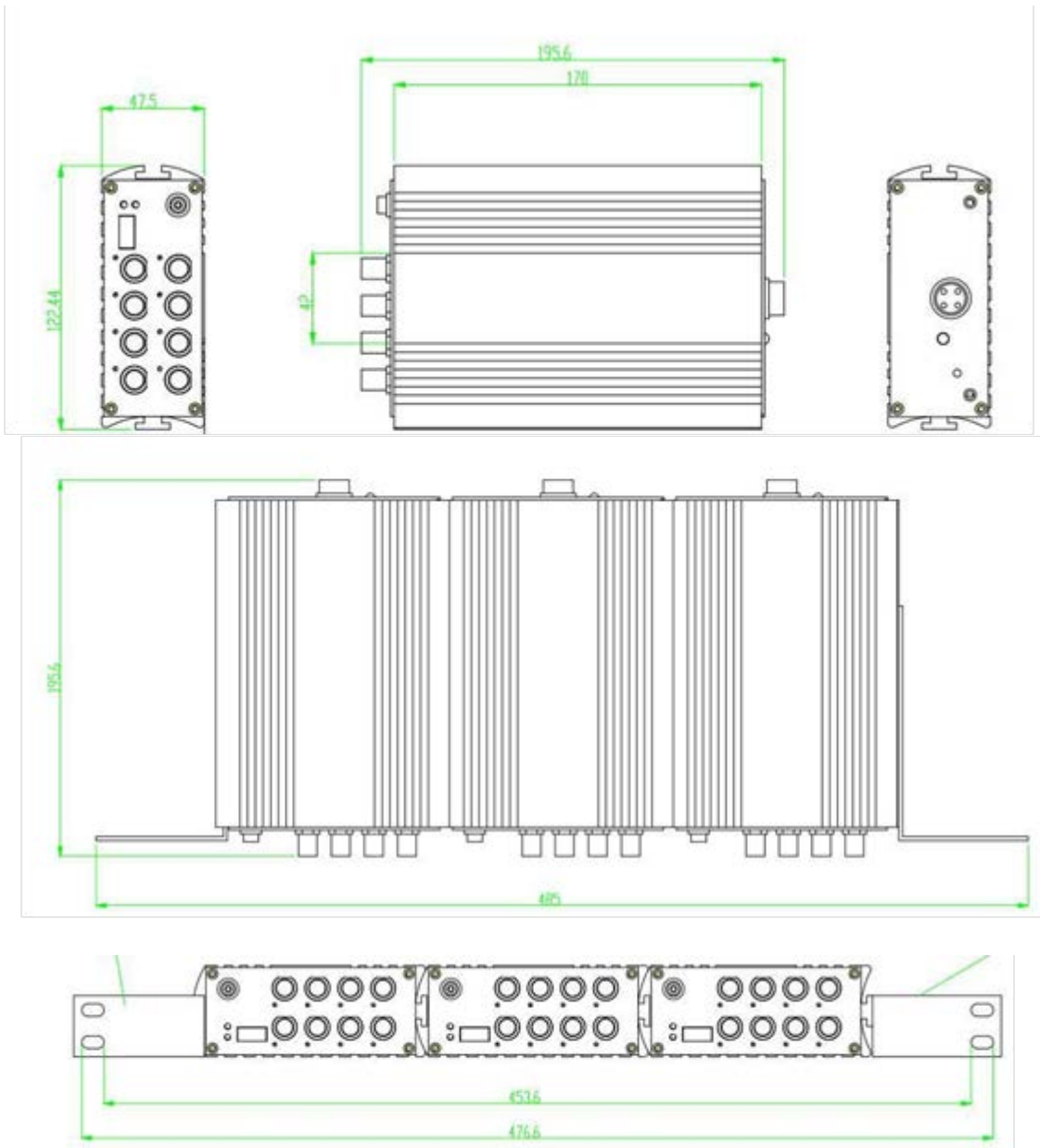
4. Specifications

Parameter	Specifications
Optical	
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)
Data interface	
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
Video	
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
Other	
Working Power Supply	100V~240VAC Adaptive
Power adapter	Input: 100V~240VAC, 50/60Hz Output: 5V, 3A
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

5. Certification

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

6. Product Structure



- END OF SPECIFICATION -