

# **Video Digital Optical Converter**

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**User' s manual**

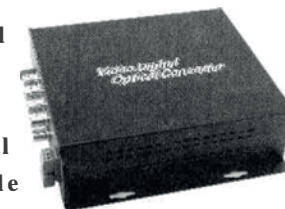


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## Product Overview

Video digital optical converter takes use of advanced digital fiber optic transmission technology, through one fiber to achieve multi-channel video, long-distance, high-quality transmission. This serial Optical Converter can provide you stable performance, clear picture quality, In addition to video and it can transmit other data, such as: RS485, Audio, Ethernet, telephone, E1 interface, we can make flexibly customized products according to requirements. Devices are available for either standalone or rack-mount installation, can be simply installed without the need for on-site commissioning, and are also suitable for different working environment.



## Product Features

- ⊙ Digitally encoded and non-compression Support high-resolution video
- ⊙ Automatic compatible with PAL SECAM NTSC video format, etc.
- ⊙ No crosstalk of optical converter with FM, PM, AM
- ⊙ Automatic power control , Automatic Overload protection , Automatic temperature compensation circuits
- ⊙ Stand-alone type or card-type installed in 19" 2U or 4U rack-mount Chassis
- ⊙ Support a variety of signal interface: Video, RS485, RS232, audio, Ethernet, telephone, E1, dry contact etc.

## Product Specifications

### Optical parameters

Optical interface:	SC ST FC LC Optional
Transmission distance:	up to 100KM
Wavelength:	1310/1550nm

### Video Parameters

Video interface:	BNC
Video input / output impedance:	75ohm
Video input / output voltage:	1 Vpp
Frequency Response:	5Hz-7.5MHz
Compatible video formats:	PAL SECAM NTSC

Differential gain ( 10%–90% APL ) :	<1.5%
Differential phase ( 10%–90% APL ) :	<1.7
Video SNR:	>65dB

### Data Parameters

Physical Interface:	phoenix terminal
Encoded type:	RS485/RS422/RS232/Manchester
Data rate:	0–400Kbps
BER:	<10 <sup>-9</sup>

### Audio Parameters

Physical Interface:	phoenix terminal
Input / output impedance:	600ohm(Unbalanced)
Data rate:	0–400Kbps
SNR:	>95dB

### Switch parameters

Physical Interface:	phoenix terminal
Input signal; Any active or passive alarm, switch input, support TTL\RS-232/422/485 or passive switch, push button	
Output:	Relays

### General indicators

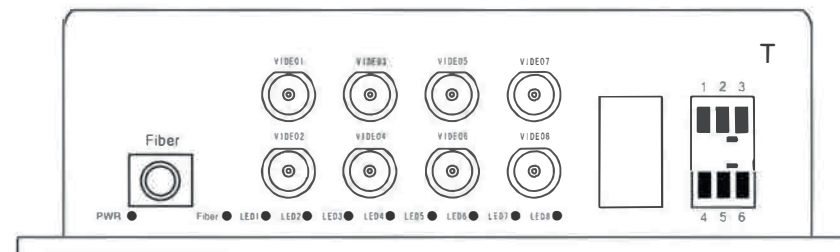
Operating Temperature:	-20℃ ~ +60℃
Humidity:	0–95% Without condensation
Operating Voltage:	DC–5V / 1A

## Application

- ⊙ Intelligent Transportation System
- ⊙ Security Systems
- ⊙ Campus Network
- ⊙ Connection of Sub-network for Surveillance Center
- ⊙ Military Monitoring (Warehouse, border guards etc)

## Panel Explanation

Distribution of the front panel: Optical interface, video interface, data interface, and LED status indicators



(8–Video Optical is took for an example, Please look at the specific kind)

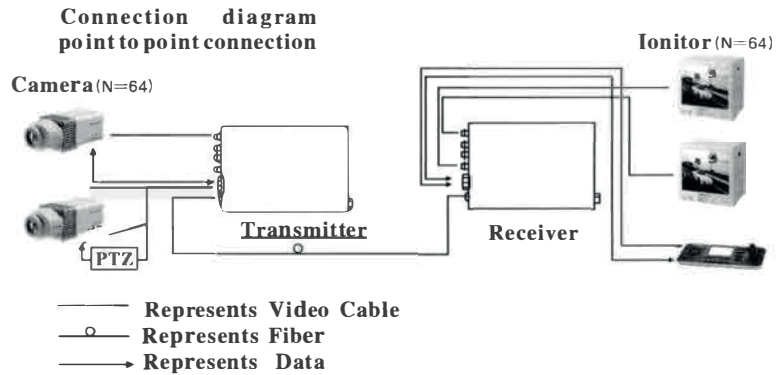
- ⊙ **Optical interface:** Through the optical fiber, transmitter and receiver can exchange the data
- ⊙ **Video interface:** video interface of Transmitter connect the camera via a coaxial cable, video interface of receiver connect to the devices such as a monitor or video matrix via a coaxial cable
- ⊙ **Data interface:** connected to RS485 or other device
- ⊙ **LED status indicators:**
- ⊙ **Power indicator:** On when powered
- ⊙ **Fiber link indicator:** Lights up when fiber port linked, else off
- ⊙ **Video link indicator:** Lights up when detect a video signal

## Installation Instructions

- ⊙ After unpacking there is a total of 5 items: 1pcs optical receiver, 1pcs optical transmitter, 1pcs user' s manual, 2pcs 5V1A power adapter or power cable, if your accessories insufficiency, please contact your supplier.
- ⊙ Carefully read the manual and connection diagram before installation
- ⊙ without the company's authorization, anyone is not allowed to disassemble the optical device
- ⊙ Note Viewing label affixed to the outside to prevent installation errors (Note: T is transmitter, R is receiver)
- ⊙ Transmitter convert the video, audio, data, data, etc. into optical signals and transmit it through the fiber, therefore, the optical transmitter can be connected with PTZ or dome cameras, etc.
- ⊙ Receiver convert the optical signal into optical video, audio, and data signals, Therefore, the optical receiver can be connected with a monitor or matrix

⊙ In order to ensure the stability of product, good working And the maximum to avoid by lightning damage, Please ensure Optical product shell grounded.

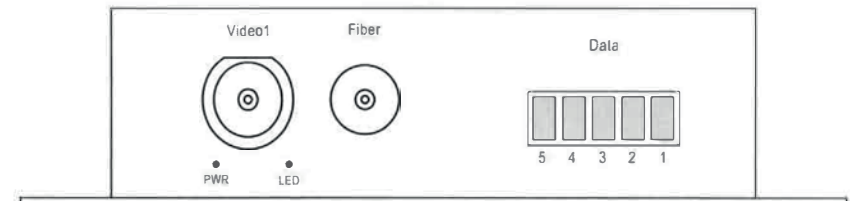
### Connection diagram



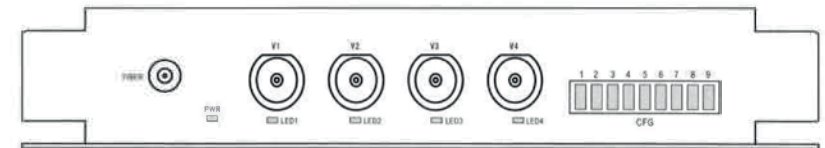
### Statement of responsibility

- ⊙ Transport process causes the device not to be used or overall damage please contacts the vendor to resolve.
- ⊙ For any form of instructions to modify the product and the resulting product functionality can not be achieved, or for other products, personal impact, our company will not be held responsible
- ⊙ During the warranty period ,Since the quality of the product itself which is not caused by normal use, the company responsible for replacement, recycled products are used by the Company
- ⊙ Since this product's packaging and packaging accessories are environmentally friendly materials, environmental protection principles should be followed for green recycling.

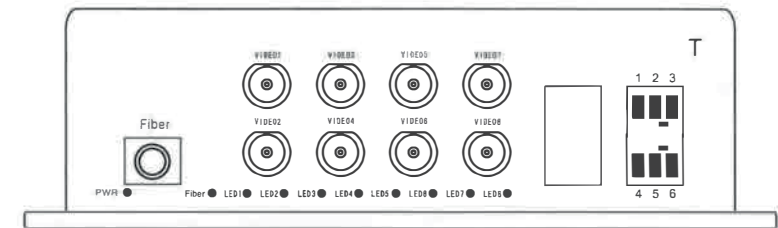
### Optical Converter Panel



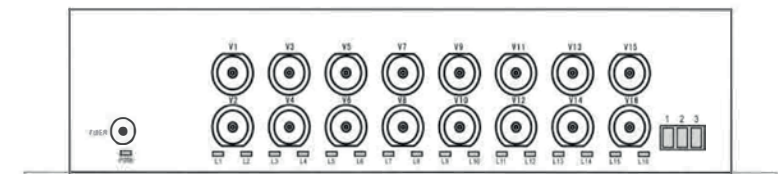
(1 channel Video)



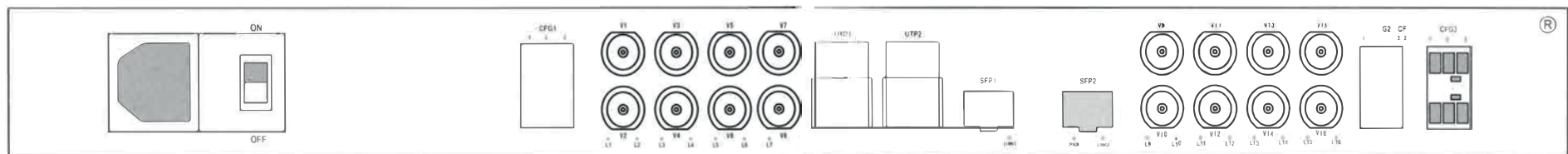
(4 channel Video)



(8 channel Video)



(16 channel standalone Video)



(16 channel 1U Video)