

## 4K HDMI Video to Fiber Optical Converter

### ➤ Features

- HDMI video support maximum resolution 4096\*2160@30Hz and downward compatibility;
- Support international standard HDMI1.4 HDCP1.4;
- EDID transparent transmission mode;
- Support RGB&YCBCR4:4:4 YUV4:4:4 /4:2:2/4:2:0;
- Support DDC/CEC/HPD signal;
- Support 1 channel bidirectional full-duplex RS232 (half-duplex RS485 optional);
- Support Single-fiber or dual-fiber (optional) ;
- Support multi-mode transmission distance 1KM, single-mode transmission 10KM;
- Real-Time Video Transmission for Exceptional Quality and Resolution;
- Support hot swap signal, plug and play, no setting required;
- Support power supply DC12V;
- Wide range of operational temperature (-20°C ~75°C);
- Warranty: 3 years;



### ➤ Introduction

UPCOM 4K HDMI video to fiber optical converter HD0111-10G is composed of the transmitter and the receiver. The video, audio and data output from the computer host (HD video signal source, HD DVD/DVR and other devices) are extended to the remote user through one core optical fiber, and the image and sound of the computer host are played in real time at the remote end.

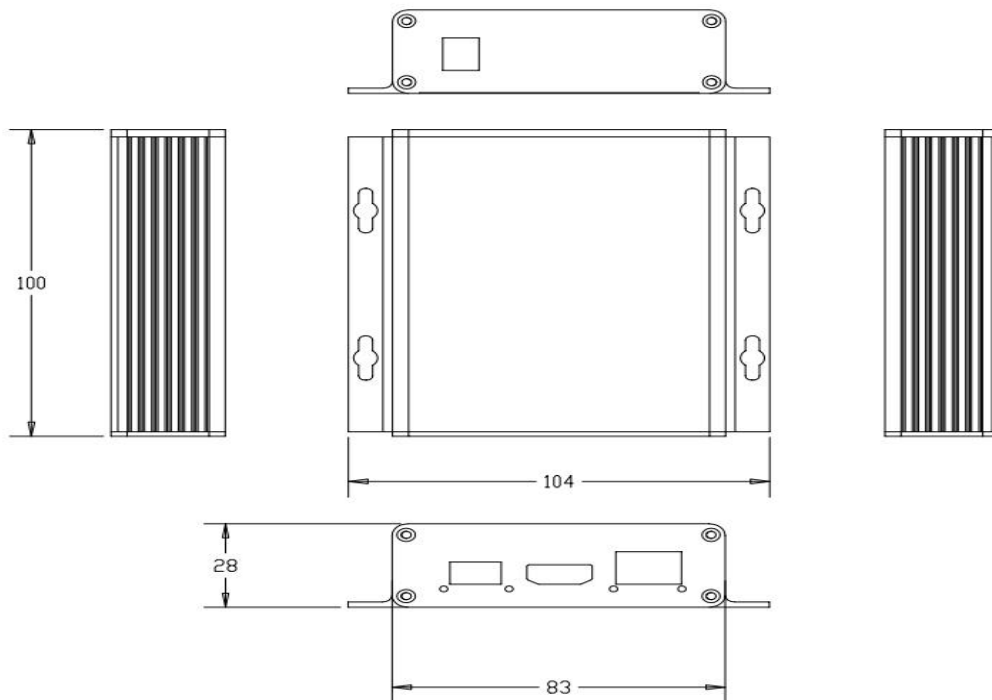
### ➤ Application

- HD monitor transmission and power supply
- LED splicing screen, projection fusion program, video conference system
- LCD splicing large screen, LED splicing screen, projection fusion scheme, video conferencing system;
- Municipal command center, substation control room, steel plant control room
- Cement plant control room, mine control room, coal mine, cement plant, thermal power station
- Fine chemical control room and digital machine room management
- High-building Security Protection, Military Tele-Com project

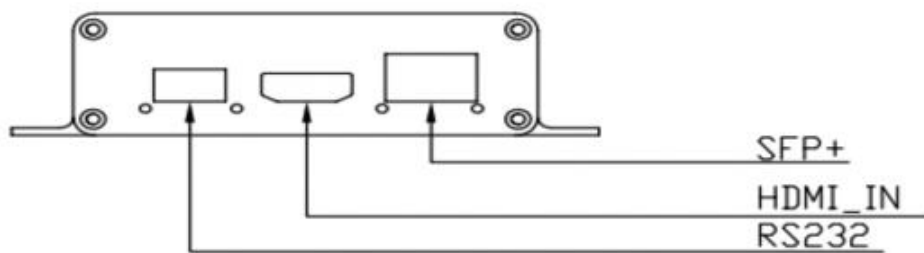
## ➤ Specification

Fiber Optical	
Wavelength	1310-1550nm
Rate	10Gbps
Tx power	> -5db
Rx sensitivity	> -14db
Fiber connector	LC
Video	
Video bandwidth	10GHz Gbps
Resolution	4096*2160@30Hz downward compatibility
Maximum pixel clock	297MHZ
Effective cable length	10M
Physical interface	HDMI female
RS232 data index (3-wire system,full duplex) standard	
Baud rate	256000Hz downward compatibility
Data bits	8 bits
Physical interface	3-pin phoenix terminal
RS485 data index (2-wire system,half duplex)	
Error rate	<10 <sup>-9</sup>
Bit rate	0-400Kbps
Physical interface	3-pin phoenix terminal
Other	
Operating temperature	-20°C ~ +75°C
Storage temperature	-40°C ~ +85°C
Power supply	12V1A
Power dissipation	<1.5W
Case	Aluminium alloy
Product net weight	0.2kg/pcs
Product weight	0.75kg/pair
Packing size	275*220*55mm
Relative Humidity	0%~95% ( no condensation)
MTBF	100,000 hours
Warranty	3 Years

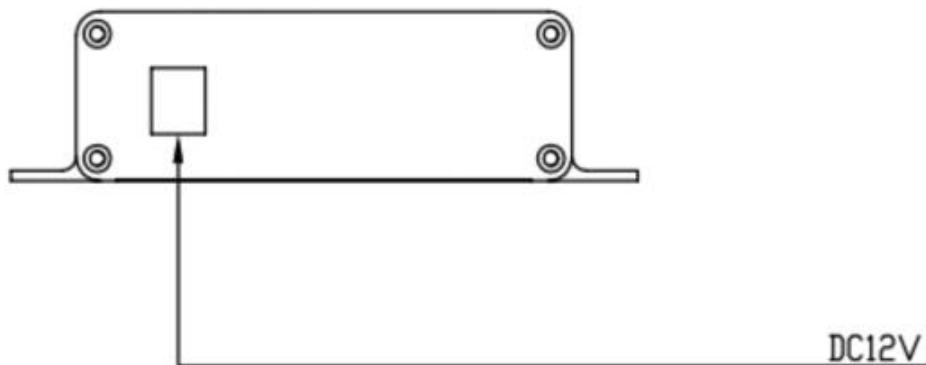
## ➤ Dimension



## Transmitter panel & Indicator description

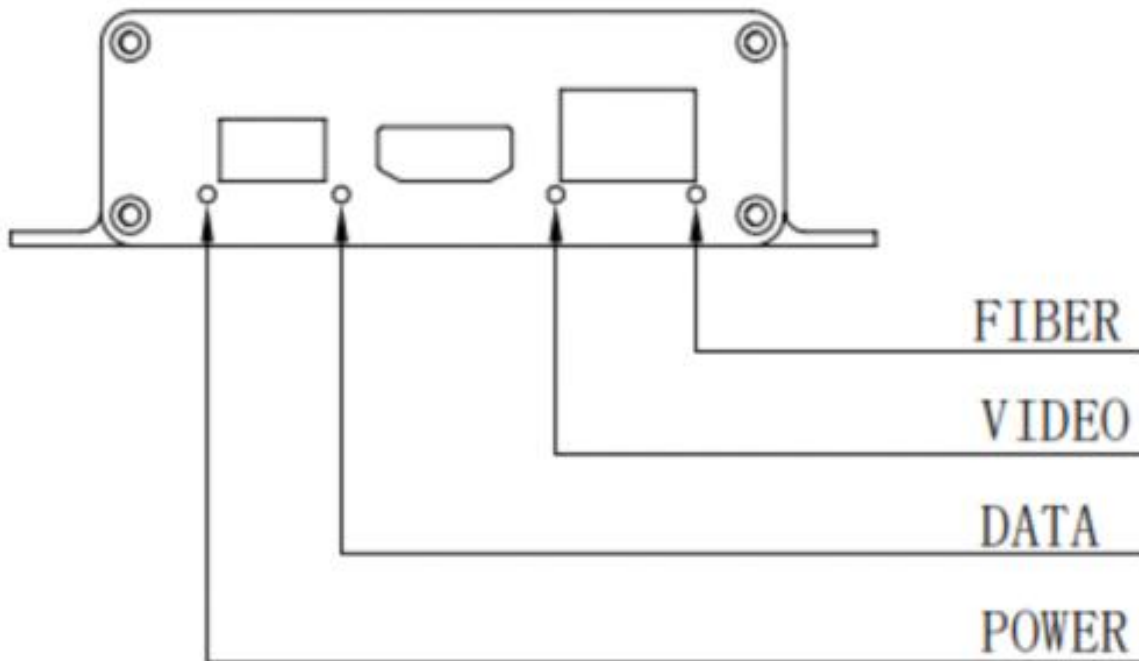


**Transmitter Front Panel**



**Transmitter Back Panel**

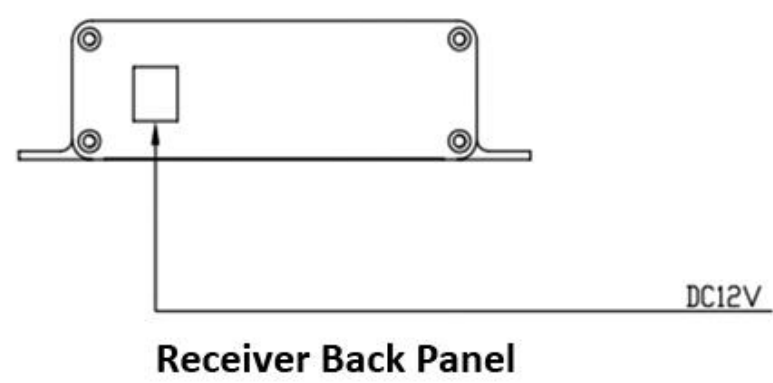
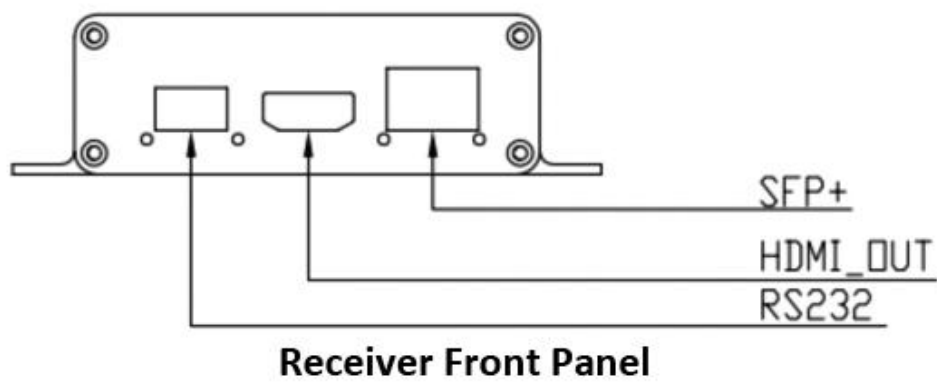
Panel Screen	Description	
SFP+	10G SFP fiber module	
HDMI IN	HDMI signal input	
RS232	1. GND	Ground wire
	2. RS232 IN	Transmit
	3. RS232 OUT	Receive
DC12V	12V power supply interface	



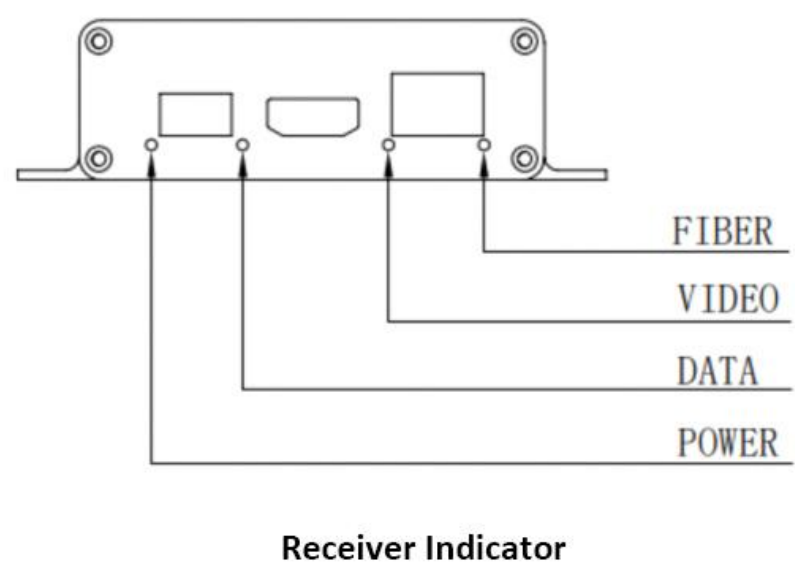
## Transmitter Indicator

Transmitter Indicator	Description
FIBER	Light on: fiber signal
	Light off: no fiber signal
VIDEO	Light on: video signal
	Light off: no video signal
DATA	Blinking: data signal
	Off : no data signal
POWER	On: the device is powered on
	Off: the device is powered off

Receiver panel & Indicator description

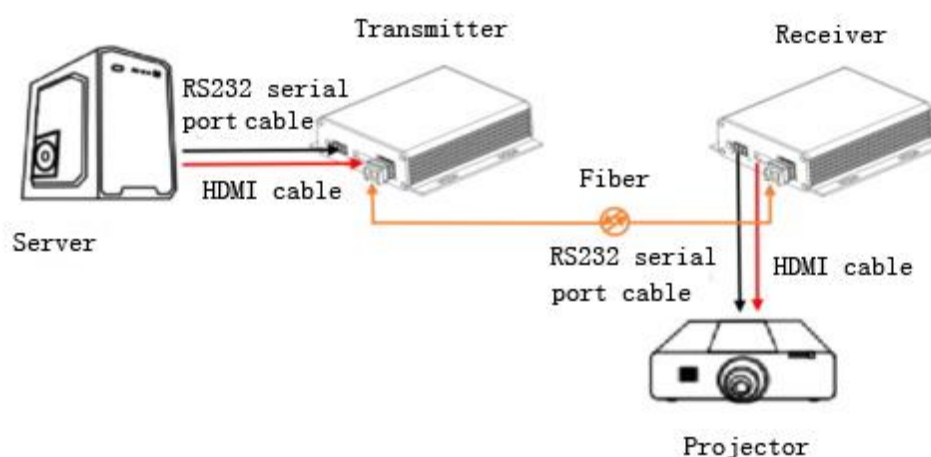


Panel Screen	Description	
SFP+	10G SFP fiber module	
HDMI OUT	HDMI signal output	
RS232	1 GND	Ground wire
	2 RS232 IN	Transmit
	3 RS232 OUT	Receive
DC12V	12V power supply interface	



Receiver Indicator	Description
FIBER	Light on: fiber signal
	Light off: no fiber signal
VIDEO	Light on: video signal
	Light off : no video signal
DATA	Blinking: data signal
	Off : no data signal
POWER	On: the device is powered on
	Off: the device is powered off

## ➤ Application



## ➤ Ordering Information

Model NO.	Description
HD0111-10G	1 Channel 4K HDMI video with local loop out + 1 channel bidirectional 3.5 audio + 1 channel bidirectional RS232 data + 1 channel reverse IR
HD0112-10G	1 Channel 4K HDMI video with local loop out + 1 channel bidirectional 3.5 audio + 1 channel bidirectional RS485 data + 1 channel reverse IR
HD0111-10G-MK	1 Channel 4K HDMI video with local loop out + 1 channel bidirectional 3.5 audio + 1 channel bidirectional RS232 data + 1 channel reverse IR + KVM
HD0111C-10G-MK	1 Channel 4K HDMI video with local loop out + 1 channel bidirectional 3.5 audio + 1 channel bidirectional RS232 data + 1 channel reverse IR + KVM + 1 channel reverse contact closure
HD0112-10G-MK	1 Channel 4K HDMI video with local loop out + 1 channel bidirectional 3.5 audio + 1 channel bidirectional RS485 data + 1 channel reverse IR + KVM
HD0112C-10G-MK	1 Channel 4K HDMI video with local loop out + 1 channel bidirectional 3.5 audio + 1 channel bidirectional RS485 data + 1 channel reverse IR + KVM + 1 channel reverse contact closure
MN-HD0100-10G	Mini 4K HDMI Video Optical Converter

## Packing List

- HDMI Video Over Fiber Converter \*1
- Power adapter:DC12V
- User manual \* 1
- Certificate of quality \* 1
- Warranty card \* 1

## Attention

### **Lightning protection,static electricity and grounding:**

It is recommended that when install the device,consideration should be given to the impact of grounding by lightning,and take prevention measures.Strong static electricity will damage the optical device and data chip in the equipment.It is recommended that when plug/unplug the data port of the optical converter,please disconnect the power supply of the optical converter first.Equipment housing is not waterproof,equipment installation box should be fully considered waterproof.

### **Fiber and optical components:**

Be careful when plugging the optical fiber as optical components of the optical converter is very fragile,and it should avoid causing damage to the optical components.It should be noted that the light source produced by the optical components of the optical converter will be harmful to eyes,so do not have direct eye contact with the optical components of optical converter.If you need to detect the optical power of the optical converter,please use the optical power meter.

### **Equipment and installation procedures:**

- Optical fiber installation:please carefully insert the optical fiber into the optical fiber interface of the optical terminal after confirming that the optical fiber link meets the installation requirements.
- Power amplifier audio signal cannot be directly sent to the transmitter,which will cause burn-in.
- Equipment installation:The equipment is used in pairs, which include a transmitter and a receiver,this information is clearly stated on the label and printed on the chassis of the equipment.