### Mini HDMI 1.4 Video to Fiber Optical Converter

### > Features

- Support HDCP protocol 1.4 standard;
- Support for EDID automatic identification;
- Support EDID memory storage function after power off;
- Support RGB4:4:4,YUV4:4:4/4:2:2/4:2:0 video format;
- Support single-mode dual-fiber/single-fiber transmission of 1KM;
- Support the status light display;
- Support power supply by charging bank ;
- Support the mutual communication with our Mini DVI 1.0 series;
- Plug and play, without debugging;
- Wide range of operational temperature (-20°C ~75°C);
- Warranty: 3 years;

## Introduction

UPCOM Mini 4K HDMI optical converter MN-HD0100-10G is developed to transmit 4K 30Hz HDMI video signal through a core/two core fiber to achieve no delay,no compression,high quality signal extension of 1 km.

Mini HDMI 1.4 optical converter adopts video processing and photoelectric conversion integrated design, high integration, small size, its optical components and core circuits are imported components, stable performance, suitable for different working environments.

Mini HDMI 1.4 optical converter conforms to the international HDCP protocol 1.4 standard, and backward compatible with HDMI1.3/1.2 version, automatic identification of EDID, with power off EDID memory storage function.

The power consumption of the mini HDMI 1.4 optical converter is less than 1.5W, and it uses micro-USB port for supply power, support power supply by charging bank, and has strong flexibility in use.

## > Application

- Stage rental
- LED large screen
- LCD splicing large screen, LED splicing screen, projection fusion
- Radio and television and video recording
- Video conferencing
- Information release and display system
- Command and dispatch center



# Specification

Fiber Optical		
Wavelength	1310nm (dual fiber) 1310-1550nm (single fiber)	
Rate	10Gbps	
Tx power	>-3db	
Rx sensitivity	>-10db	
Fiber connector	LC	
HDMI index		
Version	1.4	
HDCP	1.4	
Bandwidth	10GHz	
Pixel clock	297MHZ	
Resolution	4096*2160@30Hz and downward compatibility	
Physical interface	HDMI female	
Power index		
Power supply	5V	
Power dissipation	<1.5W	
Physical interface	Micro-USB	
Other		
Shell metal	Zine-alloy	
Dimensions	79*20*10mm	
Net weight	0.1KG	
Way to install	Direct plug-in	
Color	Black	
Material of Packing	Kraft paper	
Package size	210*160*46mm	
Gross weight	0.3KG	
Operating temperature	-20°C ~ +75°C	
Storage temperature	-40°C ~ +85°C	
Relative Humidity	0%~95% ( no condensation)	
Warranty	3 Years	







Interface Description



1	HDMI Type (HDMI male)
2	Status indicator light
3	Micro-USB power supply interface
4	LC fiber interface

## **LED Status Description**

Transmitter (T)					
Operating status	Powered up	Fiber signal	Video signal		
Indicator light status	Red light	Red light	Purple light		
Receiver (R)					
Operating status	Powered up	Fiber signal	Video signal		
Indicator light status	Red light	Purple light	Purple light		

## > Application



# Ordering Information

Model NO.	Description	
HD0111-10G	1 Channel 4K HDMI video with local loop out + 1 channel bidirectional 3.5 audio + 1 chan	
	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
- 5V USB charging head \*2
- Micro-USB cable \*2
- 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.