

## Overview

**Vi-Link High Quality HDMI Video equipment:** The HF4 Mini HDMI Video Link is a fiber optic transmitter and receiver designed to send 1 channel of 1.4a compliant 4K HDMI video and embedded audio over one multimode or single mode fiber.

The HF4 link supports HDCP automatically transmission content protected video but it is also can operate in DVI mode when the HDCP compliance is not required. Optical transmission supports uncompressed lossless HDMI 1.4a signal over multimode or single mode fiber at a resolution of 4Kx2K.

The HF4T transmitter converts HDMI signal to single 10Gb/s serial data stream then transmits over fiber optic cable. The HF4R's AGC receiver converts the 10Gb/s serial data back to the HDMI signal for distances from back-to-back up to 20 Km with single mode fiber which is unaffected by changes in fiber path attenuation due to aging or splicing points.

The fiber link also meets all of the standards of interference immunity to ensure the stability of the signal.

The mini HF4 modules offer one fiber with a standard locking LC optical connector. It is an ideal for large - screen displays, conferencing systems and high-end home entertainment.

In addition, these HF4T & HF4R modules can operate on +5VDC power from HDMI connect or from standard micro-USB power adaptor.



## Features

**4K  
ULTRA HD**

- 4K x 2K 3D HDMI Video Resolution
- 10 Gigabits Serial Data Transmission
- Compliance HDCP and HDMI 1.4a
- Support DDC, CEC, HPD
- No Settings or Adjustments
- Automatic recognizes HDCP, EDID, CEC
- Transmission Up To 2 Km @ MM Fiber
- Transmission Up To 20 Km @ SM Fiber
- Standard LC Connector
- Integrated USB connector for Power
- Dual Supply via HDMI Port & USB port

## Applications

- City and Highway Monitoring
- Metro and Railroad Monitoring
- Oil & Gas Pipeline Monitoring
- Airport Security Systems
- Utility Systems
- Military Applications
- Premise Networks
- Any HDMI Video Transmission

## Order Information

Model	Descriptions
HF4T	1-ch Mini 4K x 2K HDMI Video Transmitter (Tx) 1310nm SM LC, 20Km, Dual Power Supply (HDMI & USB)
HF4R	1-ch Mini 4K x 2K HDMI Video Receiver (Rx) 1310nm SM LC, 20Km, Dual Power Supply (HDMI & USB)

## Specifications

### System:

Error Rate	1 in $10^{12}$ or Better
Fiber Transmission	10 Gigabits per second

### Optical:

Transmitter	Lasers
Tx	1310nm @ 10Gbps
Receiver	PIN
Rx	1310nm @ 10Gbps
Fiber Distance	20Km @ SM, 2Km @ MM
Connector	LC

### Environment:

Operating	-34°C to +74°C
Storage	-40°C to +95°C
Humidity	98% Non-Condensing

### HDMI Video Interface:

Channel	1
Video Bandwidth	Up to 4K x 2K x 3D
Refresh Rate	120 Hz
Depth	Up To 48 Bits
Full HDMI Support	HDMI 1.4a With HDCP DDC, CEC, HPD
No Settings or Adjustments	Automatic Recognizes HDCP, EDID, CEC
Connector	Hot-Pluggable 19" HDMI Type A

### Physical:

Dimensions	3.5" x 0.75" x 0.4"
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### Power:

Dual Power	+5V HDMI Or USB Power Adapter
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## Application

### HDTV Monitor



HF4R



### HDMI Video Broadcast Camera



HF4T



Up to 20 Km SM Fibers