



# iFiber

*4K HDMI 2.0 MPO Pure Optical Cable*

## **Introduction**

INFOBIT 4K HDMI 2.0 18Gbps over MPO optical cables feature a detachable connector on each end of the fiber optical cable to be enough small to be prewired through conduit and other concealed spaces.

The iFiber cables are slim, easy to install with the HDMI to MPO detachable structure design.

The iFiber HDMI2.0 over pure optical fiber is a 4K Ultra High-definition cable with replaceable connectors to be upgraded to 8K HDMI2.1 in future, regardless of direction, up to 303m/ 1,000ft long distance transmission.

Standard MPO connector, standard engineering-level protection, six-core pure optical fiber, compatible with DVI, DisplayPort adapters.

It is an easy-to-use, secure connection for home video distribution, conference room presentation systems, classroom projection systems, digital signage, CCTV, Control room and command center distribution or video wall application. Supports high-definition connection between your Blu-ray, DVD, game console, computer, media player, professional video and HDTV or projector.

Fiber optics provides the speed and bandwidth needed for the best video and/ or audio quality for high definition at lengths up to 303 meters or 1,000 feet; supporting the long distances required in commercial video solutions. No extenders, baluns or amplifiers are needed, and Infobit fiber optic cables are EMI free allowing them to be installed with multiple cable pulls, providing the flexibility for remote component locations. Supporting up to 4K60Hz 4:4:4 performance up to 303 meters or 1,000 feet, Infobit cables are plenum rated and do not require time consuming fiber terminations.

Infobit compact iFiber cable is thin, durable and pre-terminated with HDMI connectors, which eliminate the need for time-consuming fiber terminations and the need for costly fiber optic tools.



## Features

### Detachable HDMI to MPO

The iFiber 4K HDMI 2.0 18Gbps over MPO optical cables feature a detachable connector on each end of the fiber optical cable to be enough small to be prewired through conduit and other concealed spaces.

No need to replace the main cable for maintenance or upgrading connectors (HDMI 2.1, DisplayPort or others) in future, saving project cost.

### Direction Concern Free

Compared with the hybrid active optical cables having uni-direction from source to display, which always cause troublesome, time cost, labor cost when field pre-wiring starting over.

Our iFiber cable can be installed from any location from a source to display without the burden of ensuring the cable is in the correct direction.

Once the bi-direction MPO cable has been prewired, it is ready for source and display connections.

### Pre-Wire, Connect and Go

The standard universal MPO connectors enable the cables to be pre-wired without directional concern.

And the “Connect-and-Go” detachable HDMI-MPO connectors eliminate both extra labor cost and the fiber terminations, testing and tools.

### Future Proof: 8K Upgrade Capable

The iFiber MPO 8-core pure fiber cable is developed with future upgrades, capable of 72Gbps bandwidth to support a variety of connectivity interfaces in future.

The MPO cable may be installed in the conduit with the Tx and Rx connectors added at a later date or upgraded as from HDMI 2.0 to 2.1, without need to re-wire or replace the cable in future by just purchasing our future connectors in order to save your future budget.

Every year the amount of data we consume increases, as do bandwidth requirements. Investing in a modern fiber optic cabling infrastructure will allow your network to operate at future speeds without replacing the cabling.



A solid multifiber backbone in a structured environment will last for years, if not decades, and likely continue to support increasing bandwidth needs. The average lifespan of a copper category specification, on the other hand, is a little over five years.

Also bear in mind that the technologies and equipment that use cabling (switches, signaling optics, servers, etc.) generally tend to decrease in cost as time goes by. It is therefore probable that higher-end connectivity will become even more affordable in the future.

## **4K UHD over 303 Meters**

Fiber optics provides the speed and bandwidth needed for the best video and/ or audio quality for high definition at lengths up to 303 meters; supporting the long distances required in commercial video solutions.

## **Secure Your Next Project**

Yes, we are unique. For AV integrators, some unique specification is always the key to win technically a tender and ensure a good profitability. Primarily, by providing a strong well-written specification, you can effectively block our competition from providing an alternative solution.

In an RFP to help our value-added partners, we have identified key areas to focus on, which in return, will result in a better 'win-ratio' to successfully secure your next project.

## **Protective Dust Caps**

These universal caps protect fiber connectors from contaminants and damage that can cause serious network slowdowns or crashes. Whenever a fiber cable is not plugged in, it should always have a dust cap protecting each connector. By simply covering your fiber connector end faces, network uptime and performance can be greatly improved.

## **Couplers**

Each iFiber cables include a pair of locking couplers designed to provide a fast and easy way to connect one male MPO fiber cable (with alignment pins) to the female iFiber Tx and Rx (without alignment pins).

### **5V power**

HDMI source components supply 5V power supply at the Tx side, INFOBIT iFiber takes advantage of this feature to draw power for the source connector.

### **No EMI and RFI**

The iFiber is pure glass fiber cable so it may be placed without concern for other cabling and without interference to or from nearby devices.

### **HDMI Data Support**

### **HDMI 2.0, HDCP 2.3 and HDR**

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The iFiber supports Display Data Channel (DDC), High Bandwidth Digital Content Protection (HDCP) and Extended Display Information Data (EDID). Hot Plug is also supported.

The iFiber supports HDMI 2.0, HDCP 2.3 and HDR

## Specifications

HDMI version	HDMI 2.0 18Gbps, backwards compatible with 1.4, 1.3
Resolution	Up to 3840x2160/60Hz, backwards compatible with 1080p/1080i/720p
Transmitter Tx	HDMI Type A to MPO Male
Receiver Rx	HDMI Type A to MPO Male
HDMI features	HDCP, EDID, CEC, ARC, 3D, HDR
Power	USB type A power supply at the Rx side, 5V DC
Cable connectors	MPO Male to Male
Fiber	850nm VCSEL, 50/125µm OM3 MPO, 8-core
Cable Diameter	2mm
Insertion Loss	≤0.3dB
EMI, RFI	EMI and RFI free
Directions	No direction
Pull strength	112 pounds or 500N
Bend radius	7.5mm
Minimum conduit	Diameter ¾ inch (21 mm)
Length	5, 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100, 120, 150, 180, 200, 250, 300 meters
Operating Temp.	-20° C to +70° C, -4° F to 158° F, 0% - 90% RH
Storage Temp.	-40° C to +80° C, -40° F to 176° F, 0% - 90% RH
Consumption	<500mW



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