



FIBBR 4K UHD HDMI Cable

PURE-Series

F-H2M





CONTENTS

1	DESCRIPTION	3
2	FEATURE.....	3
3	INSTRUCTIONS.....	4
4	SPECIFICATION	4
5	APPLICATION.....	6
6	FIBER SPECIFICATION	7
7	FIBER PERFORMANCE	7

1 Description

FIBBR Ultra series product is a HDMI active optical cable (AOC) with high performance, low power consumption and low cost. Using optical fiber to replace copper wire as the high-speed signal transmission medium, H2C can perfectly transmit 4k UHD image up to more than 50 meters. Compared with the traditional copper wire, H2C AOC is much longer, softer, more slim, with better signal quality and perfect EMI/EMC feature. Compared with other HDMI optical fiber transmission solution, H2C AOC is easy to use, has perfect compatibility, and no external power supply needed.

2 Feature

- 1) No electro-magnetic radiation, safe for everyone in the family.
- 2) Slim and flexible cable for wide range of applications.
- 3) High resistance against surrounding electro-magnetic interference.
- 4) Connect-Light enables easy cable installation.

“Display” side lighting: When “Source” connection is ready and player is power on, the “Display” side lighting LED is on. When “Display” connection is ready, the lighting LED is automatically off.

3 Instructions

使用说明
 Instructions

首先将1号插头插入播放设备
 Insert Connector 1 to player

绿灯闪烁，安装正确
 GREEN blinking, correct connection

红灯闪烁，安装错误，请确认按要求将1号插头插入相应播放设备
 RED blinking, incorrect connection; please check Connector 1 at the player

照明灯亮
 Connect-Light on

然后将2号插头插入显示设备
 Insert Connector 2 to display

连接完成
 Connected

4 Specification

Cable Length	
Catalog	1.5M ~ 50M
Interface	
HDMI type A pluggable - HDMI type A pluggable	
Speed	
18Gbps Support 4k 60Hz UHD display	
Power	
No external power needed	



Power Consumption

250mW

Mechanical / Condition

Cable diameter	4.6 mm
Bend Radius	20mm
Tensile Performance	100N
Crush	200N
Operating and Storage Temp	-40 - 70°C

5 Application

- 1) Home Theater
- 2) High definition Video Meeting System
- 3) Medical Video System
- 4) High definition Video Surveillance System
- 5) Digital Signage and TV Wall

Home Theater



HD video conference



Outdoor large screen display system



Medical, military image system



6 Fiber Specification

No.	Item	Specification	Comment
1: Sub-cable	Fiber	Fiber Bandwidth \geq 400MHz.km@850nm Cladding Diameter: $124.8 \pm 0.7\mu\text{m}$ Cladding non-circularity: $\leq 0.8\%$ Core/Cladding concentricity: $\leq 1\mu\text{m}$	4 core fiber, blue/orange/green/brown
	Coating	White PVC coating	Sub cable diameter: 0.95-1.0mm
2: Sub-Copper wire	Twisted copper	Twisted structure	
	Coating	PVC coating	7 copper wires: blue/orange/green/brown/grey/white/black Diameter: 0.72-0.74mm
3	Kevlar		4*1610dtex
4	Out coating	Black POHF-0602 or Black KPW-5890	Out diameter: $3.75 \pm 0.1\text{mm}$ Thickness: $0.55 \pm 0.05\text{mm}$
Fiber attenuation		$\leq 3.5\text{dB/km@850nm}$	
Fiber Coating Printing		EP HDMI V4 E235264 (UL) 80°C VW-1 A1b POHF-cable No XXXXm	
Braided Coating		PET, out diameter: $4.6 \pm 0.10\text{mm}$	

7 Fiber Performance

The properties report of the HDMI cable

No	Item	Index	Test Standard	Requirements	Test Results	Pass or fail
1. Attenuation property						
1	Fiber attenuation	Normal temperature test		≤4dB/km@850nm	Blue: 3.143dB/km@850nm; Orange: 3.02dB/km@850nm; Green: 3.211dB/km@850nm; Brown: 3.127dB/km@850nm	Pass
2. Mechanical property						
2	Tensile performance	Load: 200N for 5min	IEC 60794-1-2 E1A	There shall be no damage to the cable elements and the added attenuation:0.5dB@ 850nm	No cable breakage, the added attenuation of blue, orange, green and brown fiber are 0.15dB, 0.16dB, 0.12dB, 0.13dB	Pass
3	Repeated bending test	Bending radius: 45mm; Bending times: 100, load: 20N	IEC 60794-1-2 E11A	There shall be no damage to the cable elements and the added attenuation:0.5dB@ 850nm	No cable breakage, the added attenuation of blue, orange, green and brown fiber are 0.18dB, 0.15dB, 0.16dB, 0.15dB	Pass
4	Crush	Force: 500 N for 1min	IEC 60794-1-2 E3	There shall be no damage to the cable elements and the added attenuation:0.5dB@ 850nm	No cable breakage, the added attenuation of blue, orange, green and brown fiber are 0.17dB, 0.19dB, 0.19dB, 0.19dB	Pass
5	Impact	Impact energy: 2N.m; Number of impacts:10	IEC 60794-1-2 E4	There shall be no damage to the cable elements and the added attenuation:0.5dB@ 850nm	No cable breakage, the added attenuation of blue, orange, green and brown fiber are 0.13dB, 0.13dB, 0.12dB, 0.13dB	Pass
3. Environment performance						
6	High low temperature cycling	-40°C--+70°C Cycling times: 2; duration: 12h	IEC 60794-1-2 F1	There shall be no damage to the cable elements and the added attenuation:0.5dB@ 850nm	No cable breakage, the added attenuation of blue, orange, green and brown fiber are all less than 2dB@ 850nm	Pass

NOTE:

- λ This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.
- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.