



BHDC-21 Ultra High-Speed HDMI 2.1 Fiber Active Optical Cable (AOC)

Product Description:

Bones BHDC-21 ultra high speed HDMI 2.1 fiber active optical cable(AOC) is also called 8K active optical cable(AOC),8K Fiber Optic HDMI Cable, 48G HDMI® Active Optical Cable. It utilizes BONES' unique AOC+™ technology that enables conversion between input signals and optical signals for optimum high bandwidth data transmissions and **100** meters maximum transmission length (70m max. for eARC).

This EMI-resistant optical cable fully supports HDMI Maximum Data Rate 12Gbps per channel and total 48Gbps bandwidth & 4Kp50/60/100 /120 and 8Kp50/ 60 video resolution. It is the ideal solution for extending the reach of your digital signage in various settings, such as Blu-ray players, set top boxes, game consoles, monitors for large shopping malls and hospital facilities etc.

Features:

- Up to **100m** Maximum Length(70m max. for eARC);
- Plug and Play;
- Compatible with HDMI 2. 1 standard;
- Backward compatible with HDMI2. 0/HDMI1 .4;
- Support HDCP 2. 2;
- Support (HDR) Dynamic HDR formats is supported;
- Support (VRR) Variable refresh rate;
- Support (QMS) Quick media switching;
- Support (QFT) Quick frame transportation;
- Support (ALLM) Auto low latency Mode;
- Support (DSC) Display Stream Compression;
- Support 48 Gbps Bandwidth with 4Kp50/60/100 /120 and 8Kp50/ 60;
- Self-detecting function for EDID information;
- Support eARC(Enhanced audio return channel);
- No loss of signal – delivering crystal clear digital images instantly;

- Custom Length Available;

Applications:

- Digital signage
- LED signs & monitors for stadiums,hospitals,shipping malls
- Medical imaging equipment
- Airport boarding video information system
- Home Theater, Blu-ray, 3D video, projector, set-top box, DVR, game console control and monitor connection
- Radio and TV station
- Video conference equipment
- Security monitoring system

Extreme Working Environment:

Item	Symbol	Minimum Value	Maximum Value	Unit
Voltage	VCC	4.5	5.5	V
Working Temperature	Top	0	50	°C
Storage Temperature	Ts	-40	70	°C
Storage Humidity	Hs	10	80	%RH

Recommended Working Environment:

Item	Symbol	Minimum Value	Maximum Value	Unit
Voltage	VCC	4.75	5.25	V
Working Temperature	Top	0	50	°C

Technical Specification:

Item	Description	
	Transmitter (Source)	Receiver (Sink)
HDCP & DDC	HDCP 2.2 Fully Support bi- directional EDID and HDCP communication	
Video Bandwidth	12 Gbps/x4Channel	
Supported Resolution & Distance	480p, 720p, 1080i and 1080p deep color, 4Kp50/60/100/120 and 8Kp50/60 up to 30m	
O/E Converter	4 channel 850 nm VCSEL array	4 CH GaAs PD array
Connector Type	HDMI type A	
Cable Type	Hybrid type with OM3 fiber and copper wire	
Cable Length	15m/20m/30m (with +/- 20cm tolerance) Custom length available.	
Cable Outer Diameter	4.5mm	
Jacket Outer Material	PVC/TPU(Custom)	
Cable Weight TBD	Cable Weight TBD	
Cable Color TBD	Cable Color TBD	
Differential Input	100 ohm (typ)	
Power Consumption	250mW (max)	
Power Supply	Non external power required	

HDMI Type A Pin Definition:

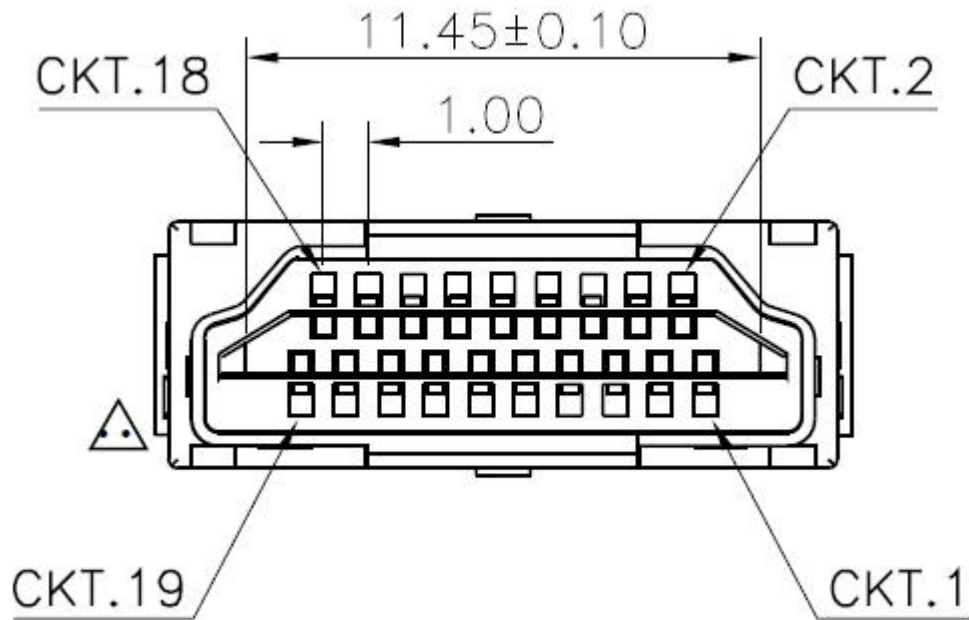
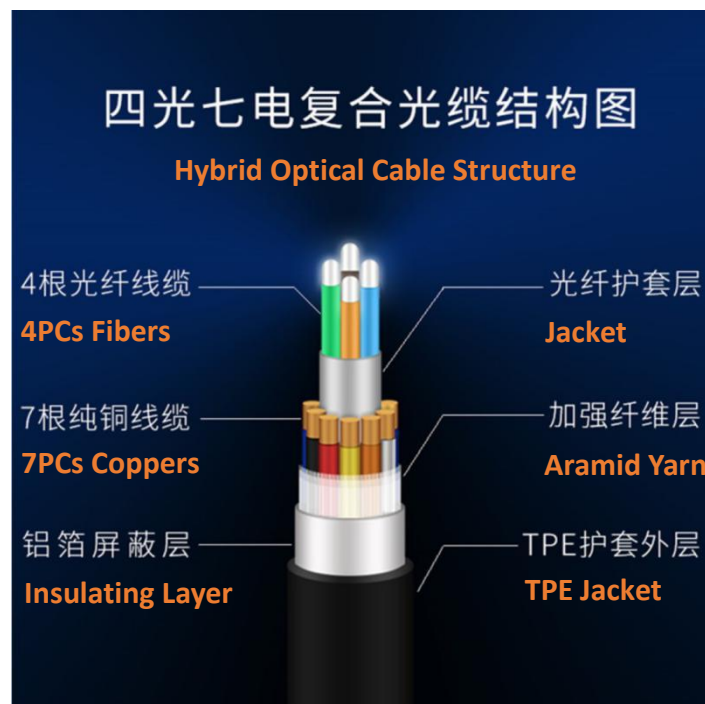


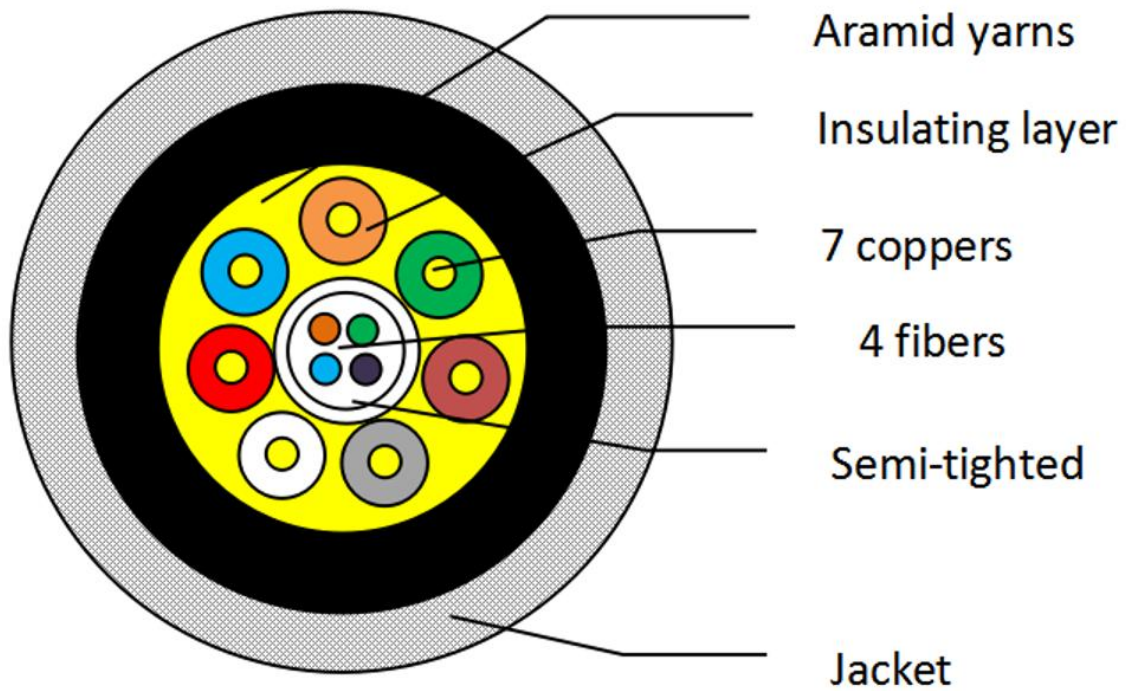
Diagram:





Hybrid Optical Cable Structure:





Ordering Information:

LENGTH	PARTNUMBER/SKU	DESCRIPTION
10m /33ft	BHDC-21MM-010	8K/60Hz,4K/120Hz,48Gbps HDMI Fiber Active Optical Cable (AOC)
15m /50ft	BHDC-21MM-015	8K/60Hz,4K/120Hz,48Gbps HDMI Fiber Active Optical Cable
20m /67ft	BHDC-21MM-020	8K/60Hz,4K/120Hz,48Gbps HDMI Fiber Active Optical Cable
30m /100ft	BHDC-21MM-030	8K/60Hz,4K/120Hz,48Gbps HDMI Fiber Active Optical Cable
40m /131ft	BHDC-21MM-040	8K/60Hz,4K/120Hz,48Gbps HDMI Fiber Active Optical Cable
50m /164ft	BHDC-21MM-050	8K/60Hz,4K/120Hz,48Gbps HDMI Fiber Active Optical Cable
60m /197ft	BHDC-21MM-050	8K/60Hz,4K/120Hz,48Gbps HDMI Fiber Active Optical Cable
70m /230 ft	BHDC-21MM-070	8K/60Hz,4K/120Hz,48Gbps HDMI Fiber Active Optical Cable

Packing:



Gift Box

5PCs/carton for 80~100
M length



10PCs/carton for
10~70 M length



Master Carton

Packing & Dimension:

Product Code	Length (m)	Gift Box (mm)	Master Carton (mm)	QTY/CTN (PCs)	N.W. (KG)/CTN	G.W. (KG)/CTN
BHDC-21-10	10	240*225*75	470*385*255	10	7.0	8.0
BHDC-21-15	15	240*225*75	470*385*255	10	8.5	9.5
BHDC-21-20	20	240*225*75	470*385*255	10	9.5	10.5
BHDC-21-30	30	240*225*75	470*385*255	10	12	13
BHDC-21-40	40	240*225*75	470*385*255	10	14.5	15.5
BHDC-21-50	50	290*275*75	565*385*300	10	20.5	21.5
BHDC-21-60	60	290*275*75	565*385*300	10	22.5	23.5
BHDC-21-70	70	290*275*75	390*350*343	5	13	14