

# BHDC-21AA

HDMI 2.1 Active Optical Cable  
Type A Male - Type A Male

## Highlights:

- Support HDMI 2.1 8K (7680 x 4320) @60Hz and HDMI 2.0 4K (4096 x 2160)@120Hz, backward compatible
- Transmission rate up to 12Gbps/channel, up to 48Gbps bandwidth
- Supports 3D full HD, HDCP2.2 two-way EDID and HDCP communication
- Support the high-bitrate audio formats up to 192kHz, 24-bit, and uncompressed 5.1 and 7.1, Dolby specific lossless audio formats, and 32-channel uncompressed audio
- Energy saving, low power consumption (max. 250mW), no extra power supply required
- Plug-and-play – no software or setting required
- RF/EMI free for clear signal transmission
- Up to 100m maximum length(70m max. for eARC )
- Customized length,logo,packaging available

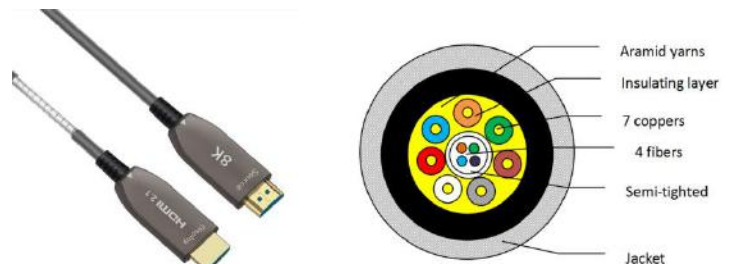
## Product information:

The BHDC-21AA is an active optical HDMI 2.1 cable designed for transmission of the next generation of 8K video content. It is able to transmit resolutions up to 8K (7680 x 4320p) 4:4:4 at 60 Hz with a bandwidth of 48 Gbps via BONES' unique AOC+™ Fiber Optic Technology, which enables transmission eliminating the possibility of electronic interference.

Ready for future HDCP 2.3 content encryption, compatible with all current and emerging HDR standards (HLG, HDR-10 and HDR-10+, Dolby Vision, Perceptual Quantizer and SL-HDR-1) and compatible with eARC HD audio standard.

## 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



## Certification:



## Properties:



## Technical Specifications:

Item	Description	
Source	Transmitter(Source)	Receiver(Display)
Solution	4 Channel 850 nm VCSEL array	4 Channel GaAs PD array
HDCP & DDC	HDCP 2.2 Fully Support bi- directional EDID and HDCP communication	
Video Bandwidth	Maximum 12Gbps/*4 Channels	
Clock Rate	600 MHz	
Bandwidth	Maximum48Gbps	
Video Resolution	7680 x 4320p @ 60Hz, 5120 x 2880p @ 60Hz, 3840 x 2160p @ 144Hz, 2560 x 1440p @ 240Hz,1920 x 1080p @ 240H	
Power Consumption	250mW(Max.)	
Power Supply	Passive, 4.5V ~ 5.5V VCC (from connected source)	
Supported Standards		
Video	DCI, Static HDR, HDR10+, Dolby Vision, HLG, SL-HDR1, PQ, BT.2020, BT.2100	
Audio	2 Ch PCM, Multichannel LPCM, DTS-X, Dolby Atmos, eARC	
Communication	HDCP, EDID, CEC, ALLM, VRR, Ethernet (100Mbps)	
Connector		
Type	HDMI 2.1 type A to type A	
Pull-out Force	2KGs	
Life Test	> 10000 cycles	
Cable		
Type	Hybrid Fiber Optic,50/125 OM3 / Fiber (4x)+ Copper wires (7x)	
Outer Jacket	Black, LSHF, 4.6mm (Ø)	
Optional Length (Tolerance±30cm)	10m/15m/20m/30m/40m/50m/60m/70m/80m/90m/100m Can be customize;	
Bending Radius	20mm(Min.)	
Tensile Strength	25KGs	
Working Temperature	0°C to 50°C (32°F to 122°F)	
Storage Temperature	-20°C to 70°C (-4°F to 158°F).	
Relative Humility	5% to 90% (non-condensing)	

## Ordering & Packing:

Product Code	Length		Gift Box (mm)	Master Carton (mm)	QTY/CTN (PCs)	N.W. (KG)/CTN	G.W. (KG)/CTN
	(Meters)	Feet					
BHDC-21AA-010	10	33	240*225*75	470*385*255	10	7.0	8.0
BHDC-21AA-015	15	50	240*225*75	470*385*255	10	8.5	9.5
BHDC-21AA-020	20	67	240*225*75	470*385*255	10	9.5	10.5
BHDC-21AA-030	30	100	240*225*75	470*385*255	10	12	13
BHDC-21AA-040	40	130	240*225*75	470*385*255	10	14.5	15.5
BHDC-21AA-050	50	165	290*275*75	565*385*300	10	20.5	21.5
BHDC-21AA-060	60	197	290*275*75	565*385*300	10	22.5	23.5
BHDC-21AA-070	70	230	290*275*75	390*350*343	5	13	14
BHDC-21AA-080	80	263	340*325*75	390*350*343	5	15	16
BHDC-21AA-090	90	295	340*325*75	390*350*343	5	16	17
BHDC-21AA-100	100	320	340*325*75	390*350*343	5	17.5	18.5

- Length can be customized, up to 300 meters.

## Packing Reference:



5PCs/Carton for  
80~100M length



10PCs/Carton for  
10~70 M length



**Gift Box**

**Master Carton**