

# HDMI 2.1 A - A AOC Cable

NT-EC-006



## Description

Our HDMI Active Hybrid Cable is the most competitive long reach HDMI interconnection solution on the market. It supports HDMI Maximum Data Rate 12Gbps total 48Gbps bandwidth with light weight, flexible and ultra-small long-term bending radius (45mm) hybrid cable. With our advanced optical engine embedded.

This HDMI Hybrid Cable provides full HDMI signal integrity, support up to 100m maximum length, plug and play. No external power required.

## Key Features

- Up to 100m Maximum Length. (Custom Length Available)
- Plug and Play
- Compatible with HDMI 2.1 standard
- Backward compatible with HDMI2.0/HDMI1.4
- Support HDCP
- Support 48G Bandwidth with 4Kp50/60/100/120 and 8Kp50/60
- Self-detecting function for EDID information
- Support eARC
- No loss of signal - delivering crystal clear digital images instantly
- Dynamic HDR formats is supported
- Hybrid optical cable with fiber and copper wire

## Applications

- Digital Signage
- LED signboards in streets and in stadiums
- Medical Imaging Equipment
- Airplane On-board Video System
- Home Theater
- Blue-ray, 3D video, Projector, Set-up box, DVR, Game Consoles and Computer
- TV Broadcast Station
- Conference Room Video Equipment
- Security systems

## Key Features

Item	Description	
Units	Transmitter(Source)	Receiver(Display)
HDCP & DDC	HDCP 2.2 Fully Support bi-directional EDID and HDCP communication	
Video Bandwidth Supported Resolution & Distance	12 Gbps/x4Channel 480p, 720p, 1080i and 1080p deep color, 4Kp50/60/100/120 and 8Kp50/60 up to 100m	
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/40m/50m/60m/70m/80m/90m/100m (with +/- 30cm 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	

## Absolute Maximum, Rating

Parameter	Symbol	Min	Max	Unit
Power Supply Voltage	VCC	4.5	5.5	V
Operating Temperature	Top	0	50	°C
Storage Temperature	Ts	-40	70	°C
Relative Humidity	Hs	10	80	%RH

## Recommended Operating Conditions

Parameter	Symbol	Min	Max	Unit
Power Supply Voltage	VCC	4.75	5	5.25
Operating Temperature	Top	0		50

## Part Code Ordering in Formation

Part Number	Description			
NT-EC-006-0005	HDMI AOC, V2.1	8K@60Hz/4K@120Hz	Support EDID/HDCP	Length 5m
NT-EC-006-0010	HDMI AOC, V2.1	8K@60Hz/4K@120Hz	Support EDID/HDCP	Length 10m
NT-EC-006-0015	HDMI AOC, V2.1	8K@60Hz/4K@120Hz	Support EDID/HDCP	Length 15m
NT-EC-006-0020	HDMI AOC, V2.1	8K@60Hz/4K@120Hz	Support EDID/HDCP	Length 20m
NT-EC-006-0025	HDMI AOC, V2.1	8K@60Hz/4K@120Hz	Support EDID/HDCP	Length 25m
NT-EC-006-0030	HDMI AOC, V2.1	8K@60Hz/4K@120Hz	Support EDID/HDCP	Length 30m
NT-EC-006-0040	HDMI AOC, V2.1	8K@60Hz/4K@120Hz	Support EDID/HDCP	Length 40m
NT-EC-006-0050	HDMI AOC, V2.1	8K@60Hz/4K@120Hz	Support EDID/HDCP	Length 50m
NT-EC-006-0060	HDMI AOC, V2.1	8K@60Hz/4K@120Hz	Support EDID/HDCP	Length 60m
NT-EC-006-0070	HDMI AOC, V2.1	8K@60Hz/4K@120Hz	Support EDID/HDCP	Length 70m
NT-EC-006-0080	HDMI AOC, V2.1	8K@60Hz/4K@120Hz	Support EDID/HDCP	Length 80m
NT-EC-006-0090	HDMI AOC, V2.1	8K@60Hz/4K@120Hz	Support EDID/HDCP	Length 90m
NT-EC-006-0100	HDMI AOC, V2.1	8K@60Hz/4K@120Hz	Support EDID/HDCP	Length 100m

## Installation

