

**Model** : ATZ AOC-HDMI2.1-xxM (xx=Length)

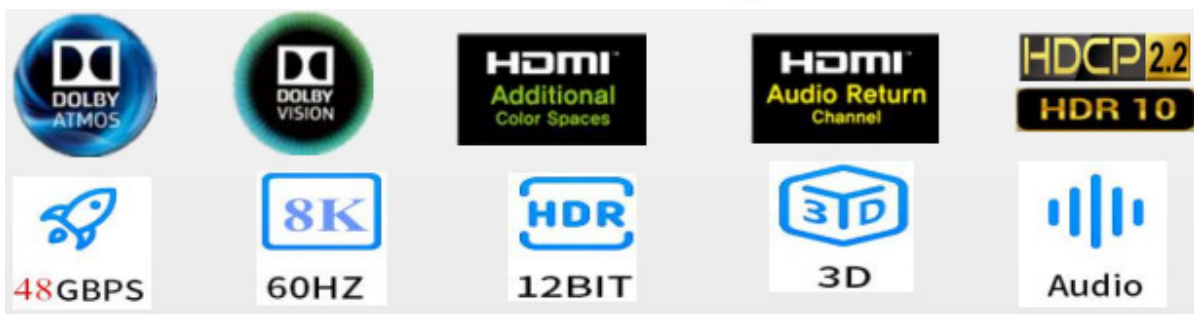
**Description** : HDMI Active Optical Cable V2.1 - 8K@60Hz, 48Gbps  
(10m/15m/20m/25m/30m/40m/50m/60m/70m/80m/90m/100m)



Laser brand: Philips or II-VI (Imported)



Chipset brand: Silicon Line (German)



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 (20mm) hybrid cable. With our advanced optical engine embedded.

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## 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
- Hybrid 4-core optical fiber transmits TMDS signals, 7-core tinned Copper transmits signalling protocol. Anti-electromagnetic interference, No attenuation.
- Support HDCP2.3
- Support 48G Bandwidth with 4Kp50/60/100/120 and 8Kp50/60
- Supports 16bit/24bit (RGB/YCbCr) Deep Color depth, HDR, CEC, 3D and eARC.
- Self-detecting function for EDID information.
- Zinc alloy shell Anti-electromagnetic interference increase wear resistance and improve service life.
- No loss of signal – delivering crystal clear digital images instantly.
- Dynamic HDR formats is supported.

**\*Remarks:** *This is a uni-directional cable. Please ensure correct connection with connector ends labelled with “→ to source” and “to display→”.*

*The cable will not be damaged, nor will it cause the connected devices to be damaged, due to wrong connection.*

## Application:

- 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

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### 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	Typical	Max	Unit
Power Supply Voltage	VCC	4.75	5.0	5.25	V
Operating Temperature	Top	0		50	°C

### Specifications:

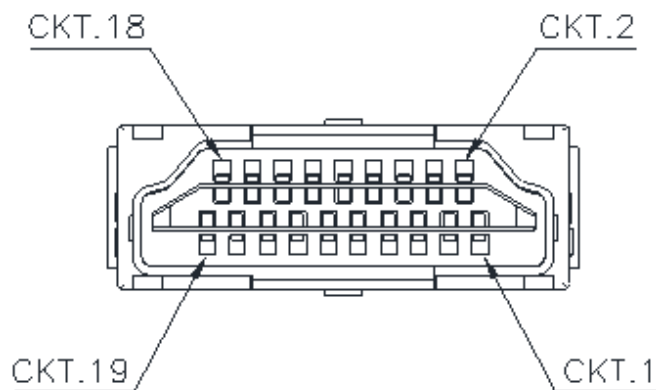
Item	Description	
Units	Transmitter (Source)	Receiver (Sink)
HDCP & DDC	HDCP 2.3 Fully Support bi-directional EDID and HDCP communication	
Video Bandwidth	12Gbps/x4Channel	
Supported Resolution & Distance	480p, 720p, 1080i and 1080p deep colour, 4Kp50/60/100/120 and 8Kp50/60 up to 100m	
O/E Converter	4 channel 850 nm VCSEL array	4 CH GaAs PD array
Connector Type	HDMI type A	
Cable Type	Hybrid type with OM3 fiber and OFC copper wire	
Cable Shielding	double layer aluminum foil	
Cable wire filling	Reinforced with Kevlar (Imported DuPont)	
Cable tension force	24kg	
Cable Length	15m/20m/30m/40m/50m/60m/70m/80m/90m/100m (with +/-30cm tolerance) Custom length available.	
Cable Outer Diameter	4.5mm	
Shell	Zinc Alloy	
Compliants	RoHS 2.0 & REACH compliant	
Jacket Outer Material	PVC/TPU(Custom)	

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Cable Weight TBD	Cable Weight TBD
Cable Colour TBD	Cable Colour TBD
Differential Input	100 ohm (typ)
Power Consumption	250mW (max)
Power Supply	Non external power required

### HDMI Type A Pin Assignment



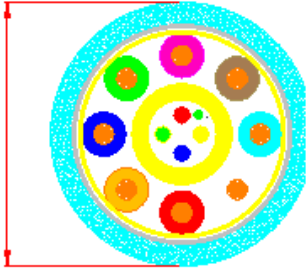
### HDMI Type A Connector Pin Assignment

PIN	Function	PIN	Function
1	T.M.D.S. Data 2+	11	TMDS Clock Shield
2	T.M.D.S. Data 2 Shield	12	TMDS Clock-
3	T.M.D.S. Data 2-	13	CEC
4	T.M.D.S. Data 1+	14	Utility
5	T.M.D.S. Data 1 Shield	15	SCL
6	T.M.D.S. Data 1-	16	SDA
7	T.M.D.S. Data 0+	17	DDC/CEC Ground
8	T.M.D.S. Data 2 Shield	18	+5V Power
9	T.M.D.S. Data 0-	19	Hot Plug Detect
10	TMDS Clock+		

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### Hybrid Cable Profile

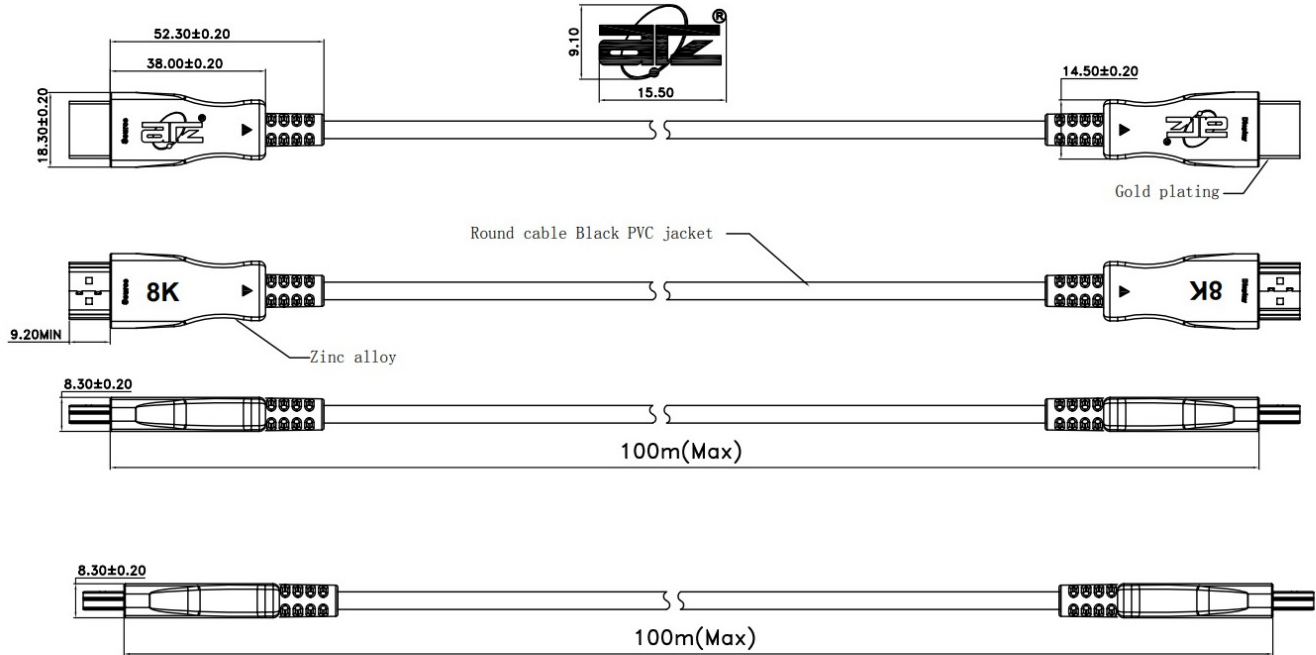


### Ordering Information

Part Number	Description
ATZ AOC-HDMI-V2.1-10M	HDMI AOC, V2.1, 8K 4K/60P, Support EDID/HDCP, Length 10m
ATZ AOC-HDMI-V2.1-15M	HDMI AOC, V2.1, 8K 4K/60P, Support EDID/HDCP, Length 15m
ATZ AOC-HDMI-V2.1-20M	HDMI AOC, V2.1, 8K 4K/60P, Support EDID/HDCP, Length 20m
ATZ AOC-HDMI-V2.1-30M	HDMI AOC, V2.1, 8K 4K/60P, Support EDID/HDCP, Length 30m
ATZ AOC-HDMI-V2.1-40M	HDMI AOC, V2.1, 8K 4K/60P, Support EDID/HDCP, Length 40m
ATZ AOC-HDMI-V2.1-50M	HDMI AOC, V2.1, 8K 4K/60P, Support EDID/HDCP, Length 50m
ATZ AOC-HDMI-V2.1-60M	HDMI AOC, V2.1, 8K 4K/60P, Support EDID/HDCP, Length 60m
ATZ AOC-HDMI-V2.1-70M	HDMI AOC, V2.1, 8K 4K/60P, Support EDID/HDCP, Length 70m
ATZ AOC-HDMI-V2.1-80M	HDMI AOC, V2.1, 8K 4K/60P, Support EDID/HDCP, Length 80m
ATZ AOC-HDMI-V2.1-90M	HDMI AOC, V2.1, 8K 4K/60P, Support EDID/HDCP, Length 90m
ATZ AOC-HDMI-V2.1-100M	HDMI AOC, V2.1, 8K 4K/60P, Support EDID/HDCP, Length 100m

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## Product Diagram:

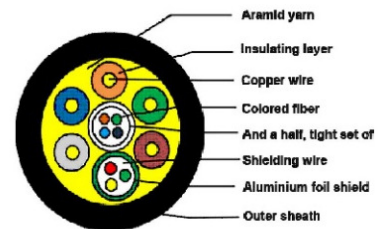


### NOTE:

- Supports computer resolutions to 4K@120Hz or 8K@60Hz 4:4:4
- Plug and Play
- Support HDCP2.3@eARC
- Self-detecting function for EDID information
- No loss of signal
- Hybrid optical cable with fiber and copper wire
- PIN gold plated, shell gold plated
- Environmental Specifications: For Indoor use only;
- Operating temperature: -40°C to 70°C
- Minimum bending radius 20mm
- Max. tension force: 100N
- Powered via HDMI devices
- 4core OM3 Multimode Fiber (high speed data) and 7core copper cable
- Round cable Black PVC jacket
- RoHS 2.0 & REACH compliant
- Packing: package 1pc reel

### Model No.

- ATZ FO-HDMI-CABLE-V2.1-10M
- ATZ FO-HDMI-CABLE-V2.1-15M
- ATZ FO-HDMI-CABLE-V2.1-20M
- ATZ FO-HDMI-CABLE-V2.1-25M
- ATZ FO-HDMI-CABLE-V2.1-30M
- ATZ FO-HDMI-CABLE-V2.1-40M
- ATZ FO-HDMI-CABLE-V2.1-50M
- ATZ FO-HDMI-CABLE-V2.1-60M
- ATZ FO-HDMI-CABLE-V2.1-70M
- ATZ FO-HDMI-CABLE-V2.1-80M
- ATZ FO-HDMI-CABLE-V2.1-90M
- ATZ FO-HDMI-CABLE-V2.1-100M



## Warranty: 2 Years

Warranty is effective from the date of original delivery.

This warranty shall be void if a serial number has been removed from the product.