

# HDMI2.1 AOC – active optical Cable for max. Length 100m



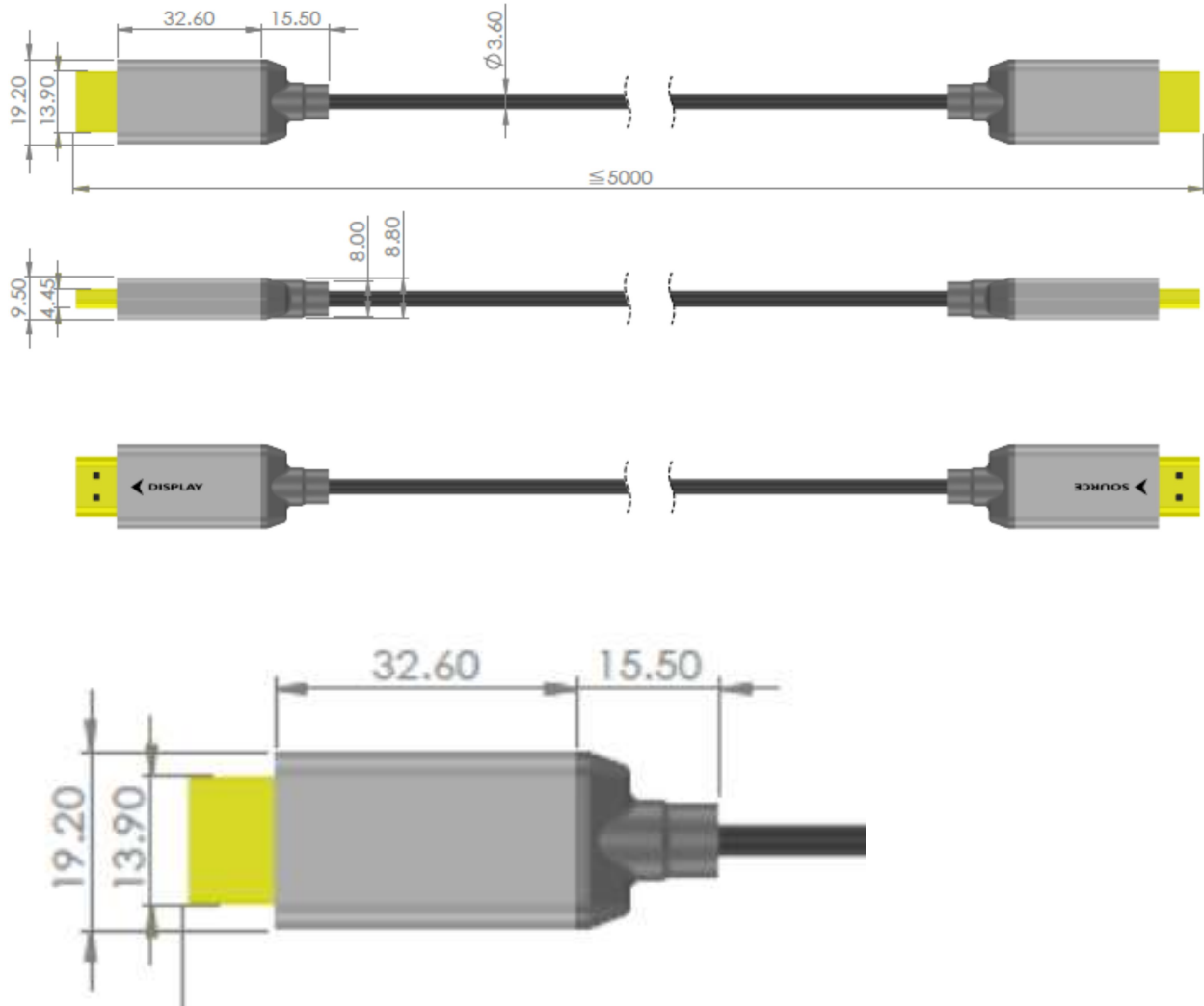
## Features

- Compliant with HDMI 2.1 Standard
- Length up to 100m
- Supports 12 Gbit/sec and channel, total 48Gbit/sec
  - 8K@60Hz 12bit YCbCr 4:2:0
  - 8K30Hz 12bit YCbCr 4:4:4
- OD 3,6mm, very slim and flexible
- Very good EMI behaviour due to optical technology
  
- Bonded chip and lens for high reliability and stable quality
- Made in Taiwan in a fully automated production line
- Customization possible
- Steel arming available

## Application

- Industrial PC
- Medical Application
- Airplane On-board Video System
- Projectors
- Security Systems
- Conference Room Equipment
- Home Theater

# Physical Drawing



# Specification

## 1. Performance

Standards Compliance	HDMI 2.1
Maximum Video Bit Rate	Supports up to 12 Gbps per channel, 48Gbps total
Maximum Supported Resolutions	8K60Hz with 12bit YCbCr 4:2:0 8K30Hz with 12bit YCbCr 4:4:4

## 2. Supported Standards

≤ 5m	CEC/DDC and HDCP 1.3/2.2/2.3
≤ 5m	HDMI Link
≤ 5m	ARC/eARC
	Dynamic HDR, Display Stream Compression (DSC)
	High Frame Rate (HFR), Variable Refresh Rate (VRR), Quick Media Switching (QMS), Quick Frame Transport (QFT), Auto Low Latency Mode (ALLM)
	L-PCM, Dolby Digital, DTS Digital Surround, Dolby Digital Plus, DTS-HD High Resolution Audio, Dolby TrueHD, DTS-HD Master Audio, Dolby Atmos, DTS: X

## 3. Connections

DisplayPort Input / Output	19-pinHDMI Type-A
Power	Bus powerd No external power supply is required

## 4 Optical

Parameter	Specification	Notes
Optical Fiber	50/125um OM2 4	4 Channels
Minimum Cable Bending Radius	10mm	
Cable Jacket	PVC	
Cable Diameter	3.6mm	± 0.2mm

### 3.1 Absolute Maximum Ratings

Parameter	Min	Typ	Max	Unit
Operating Temperature	0	25	50	°C
Storage Temperature	-20		70	°C
Storage Relative Humidity	PVC		65	%

### 3.2 Optical and Electrical Characteristics

Parameter	Min	Typ	Max	Unit
Optical Wavelength		850		nm
Bit Rate (Each Channel)			12	Gbit/sec
Supply Voltage	4,8	5	5,3	V
Supply Current		56		mA
Differential Impedance	85	100	115	Ohm

### 3.3 Mechanical and Environment Test (Will do under mold sample)

Parameter	Min	Typ	Max	Unit
Cable Pull Out Force			TBD	Kgf
Thermal Cycle (71hrs)	-40		85	°C
Damp Heat (96hrs)			85	%RH & °C
High Temperature Operation (96hrs)			75	°C

## How to order

Partnumber	Description	Length
HDMI2101-xxxxxx	HDMI 2.1 Hybrid AOC	Custom xxxxxx in mm
HDMI2101-005000	HDMI 2.1 Hybrid AOC	5m
HDMI2101-010000	HDMI 2.1 Hybrid AOC	10m
HDMI2101-015000	HDMI 2.1 Hybrid AOC	15m
HDMI2101-020000	HDMI 2.1 Hybrid AOC	20m
HDMI2101-030000	HDMI 2.1 Hybrid AOC	30m
HDMI2101-040000	HDMI 2.1 Hybrid AOC	40m
HDMI2101-050000	HDMI 2.1 Hybrid AOC	50m

## Please contact us for customization

### Available Options

- Custom length
- Custom connector
- Custom label on Cable
- Custom label on Packing
- Fiber cable with steel arming
- Colour