

## Active Optical HDMI Cable with Detachable Connectors

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# TECHNICAL SPECIFICATION



The Covid Active Optical HDMI Cable is the perfect solution for critical AV installations that demand flawless signal integrity. The latest advances in technology allow the Active Optical HDMI Cable to be compliant with 3D, 4K UHD resolutions, as well as features like HPD, EDID, HDCP and CEC link operations.

The Active Optical HDMI Cable has features unlike any other which make it the best choice when flexibility is the key. The Active Optical HDMI Cable is thinner, lighter and more flexible than copper. The HDMI ends quickly detach offering a much smaller head that can be run through conduit or other tight spaces and they are also interchangeable. HDMI or DVI connectors can be purchased separately to easily make a DVI to HDMI, HDMI to HDMI or DVI to DVI interconnect using the same optic cable. These features make this HDMI cable the perfect flexible solution unlike any other for those tight spaces.

The Active Optical HDMI Cable is offered at lengths up to 100m (328ft.), which is far beyond the normal reach of conventional copper HDMI cables.

**Note:** These cables are recommended for point-to-point application use only. Not to be used with wall plates, additional patch cables or coupling devices.

## Features

- Up to 4K 30Hz, 3D, Deep Color
- Multi-channel Audio, Dolby TrueHD, DTS-HD Master Audio
- HDMI 1.4 Compliant : EDID, CEC, HDCP
- EMI & RFI Immunity
- Plug & Play Operation
- Integrator-oriented removable HDMI-A ends for easy advanced wiring
- Interoperable field flexibility : HDMI-D with HDMI-A & HDMI-D with DVI-D single link
- Built-in powering (No external 5V USB power port)
- High pulling strength & compression load
- Low power consumption
- Plenum (CMP) Rating, (Low Smoke Zero Halogen, LSZH) Also available by special order).

## Applications

- Professional AV systems interconnection
- In & outdoor digital signage panels & kiosks
- Home theater systems
- Facility automation systems

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## Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max	Unit
Supply Voltage	VCC	-0.5		6	V
Storage Temperature	Tstg	-30		70	°C
Relative Humidity	RH	5		85	%
Electrostatic Discharge Immunity (Air: 8kV, Contact: 6kV)		B			Class

## Recommended Characteristics

Parameter	Symbol	Min.	Typ.	Max	Unit
Supply Voltage <sup>1</sup>	VCC	-0.5	5	6	V
Operating Temperature	T <sub>OP</sub>	0		50	°C

<sup>1</sup> All power supplied from HDMI port.

## Electric Characteristics

Parameter	Symbol	Min.	Typ.	Max	Unit
Operating Current	I <sub>OP</sub>	38	50	56	mA
Power Consumption	P <sub>O</sub>	0.19	0.25	0.28	W
TMDS Different Input Voltage	V <sub>ID</sub>	400		1600	mV
TMDS Different Output Voltage	V <sub>OD</sub>	200	300	400	mV
TMDS Data Bit Rate		250		3400	Mbps

## Physical Characteristics

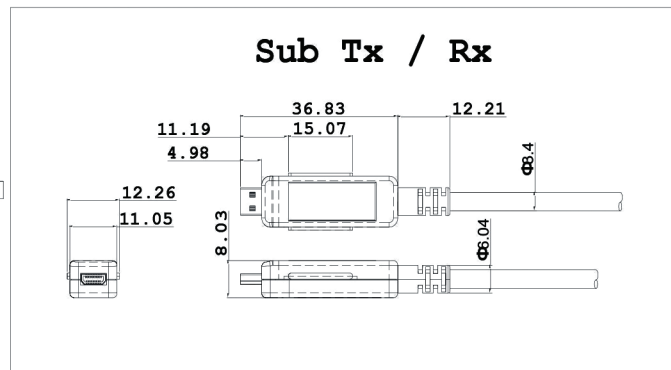
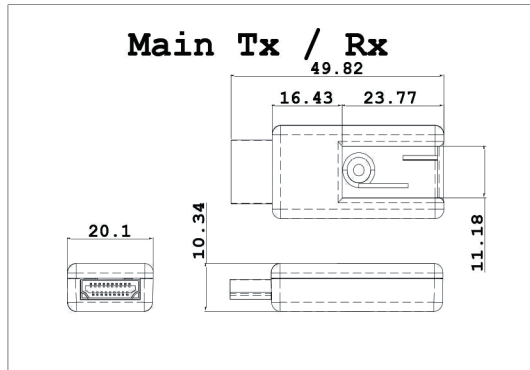
Parameter	Value	Unit
Cable Dimensions (WXH)	3.4mm (±0.2mm)	mm
Cable Color	Gray	-
Optical Fiber	Multi-mode fiber	5
Copper Wire	28 AWG TA (7/0.127mm)	-
Cable Jacket Material	CMP-OF (UL) & LSZH	-
Connector Pull Strength	50	Kg
Compression Load Resistance	50	Kg
Minimum Bending Radius	6	mm
Case Material	ABS (Acrylonitrile-Butadiene-Styrene)	-

## Active Optical HDMI Cable with Detachable Connectors

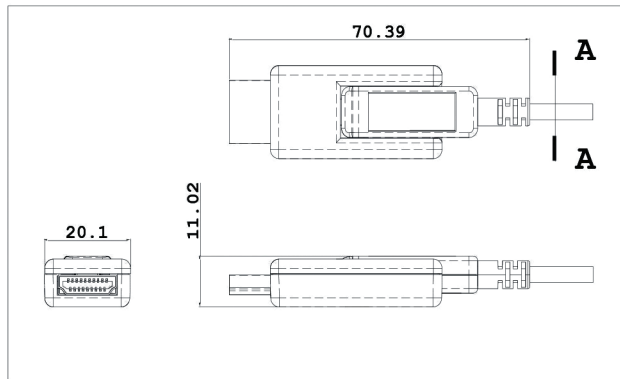
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## Product Dimensions

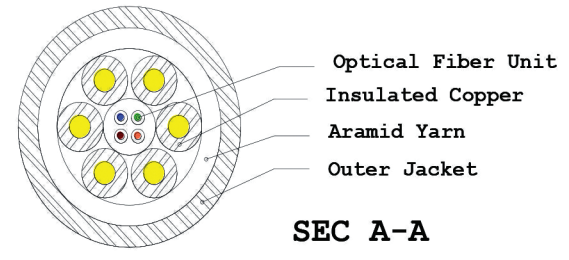
Unit of Measure (mm)



## HDMI Connector



## Cross-sectional Drawing of Cable



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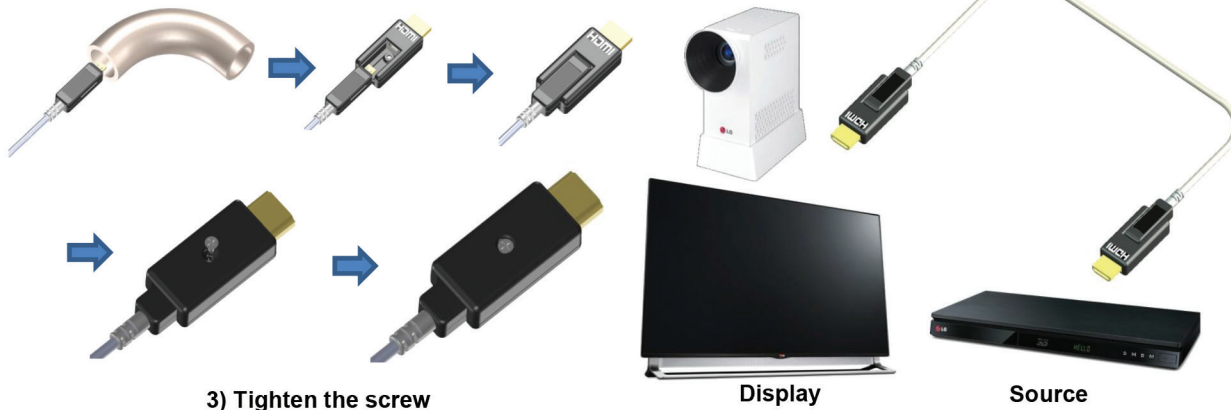
## Physical Characteristics

Pin	Symbol	
1	CH2+	TMDS data signal channel 2 positive
2	GND	TMDS data signal channel 2 shield
3	CH2-	TMDS data signal channel 2 shield
4	CH1+	TMDS data signal channel 1 positive
5	GND	TMDS data signal channel 1 shield
6	CH1-	TMDS data signal channel 1 negative
7	CH0+	TMDS data signal channel 0 positive
8	GND	TMDS data signal channel 0 shield
9	CH0-	TMDS data signal channel 2 negative
10	CLK+	TMDS data signal channel positive

Pin	Symbol	
11	GND	TMDS clock signal channel shield
12	CLK-	TMDS clock signal channel negative
13	CEC	Consumer Electric Control
14	N.C	N.C
15	SCL	DDC clock
16	SDA	DDC data
17	GND	DDC/CEC shield
18	5V	DC +5V
19	HPD	Monitor detector signal

## Product Installation Diagram

1) Pulling through conduit      2) Connect HDMI-D with HDMI-A Adaptor



3) Tighten the screw

Display

Source

1. Insert HDMI-D cable assembly into the conduit.
2. Connect HDMI-D with HDMI-A adaptor.
3. Screw the HDMI-D as shown on 3.
4. Plug in Tx Connector labeled "SOURCE" to HDMI port of source device like PC or Blue-ray Player.
5. Plug in Rx Connector labeled "DISPLAY" to HDMI port of display device like a monitor or TV.
6. Follow the same process to connect other SOURCE and DISPLAY devices.

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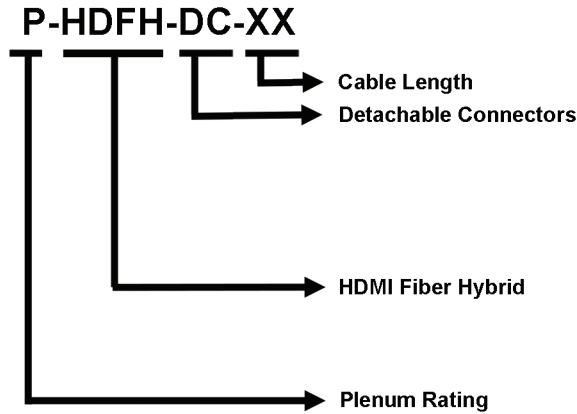
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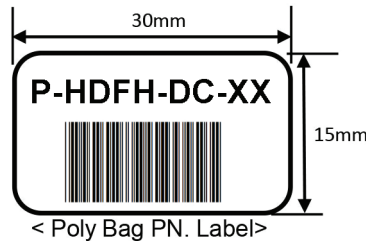
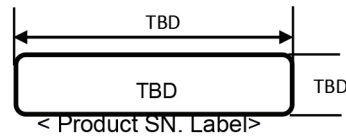
## Ordering Information



## Cable Length Index

Length	Code
32ft.	32
49ft.	49
75ft.	75
98ft.	98
164ft.	164
196ft.	196
262ft.	262
328ft.	328

## Product Labeling



## Safety Labels



Caution Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

-Please do not disassemble, Modify the product or cut off the cable

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