

## Premium Armored Optic HDMI 2.0 Cables



### *Descriptions*

Our armored HDMI Active Hybrid Cable is the most competitive long reach HDMI interconnection solution on the market. It supports HDMI Data Rate 6Gbps per channel ,total 18Gbps 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)
- ◆ Low Power Consumption: 250mW (max);
- ◆ Plug and Play;
- ◆ Compatible with HDMI 2.0 standard;
- ◆ Support HDCP1.4/2.2;
- ◆ Self-detecting function for EDID information;
- ◆ No loss of signal – delivering crystal clear digital images instantly;
- ◆ Supports computer resolutions to 1080P and 4K2K(60P);
- ◆ Hybrid optical cable with fiber and copper wire;
- ◆ Crush Resistance: Long term100kg; Short term 200kg.

## 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

## 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

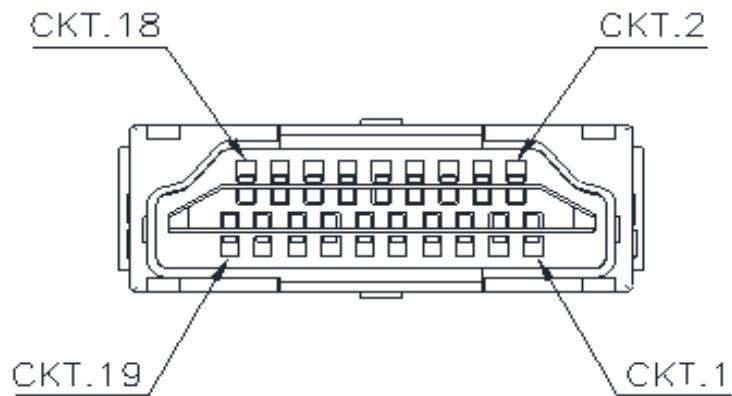
## Recommended Operating Conditions

Parameter	Symbol	Min	Typical	Max	Unit
Power Supply Voltage	VCC	4.75	5.0	5.25	V
Operating Temperature	Top	-40		80	°C

## Specifications

Item	Description	
Units	Transmitter (Source)	Receiver (Sink)
HDCP & DDC	HDCP 2.2 Fully Support bi-directional EDID and HDCP communication	
Video Bandwidth	6 Gbps/x3Channel (max)+ Clock.	
Supported Resolution & Distance	PC: WUXGA 1920 x 1200 up to 100 meters , HDTV : 480p, 720p, 1080i and 1080p deep color, 4K(60P), 3DFull HD 1920 x 1080 up to 100 meters	
O/E Converter	4 channel 850 nm VCSEL array	4 CH GaAs PD array
Connector Type	HDMI type A	
Cable Type	Armored 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	5.8mm	
Jacket Outer Material	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	

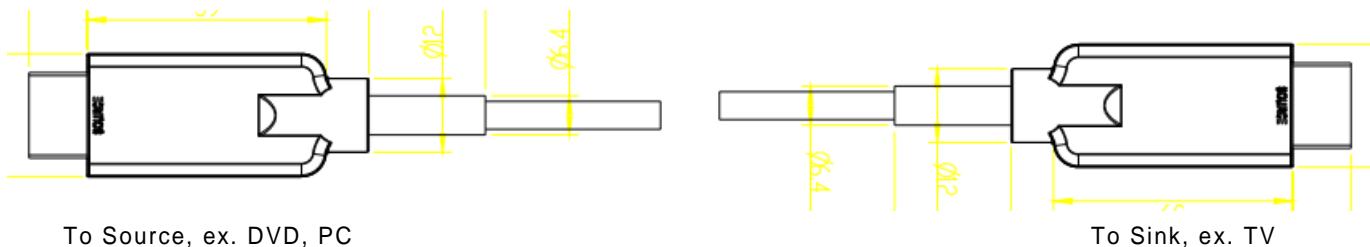
## HDMI Type A Pin Assignment



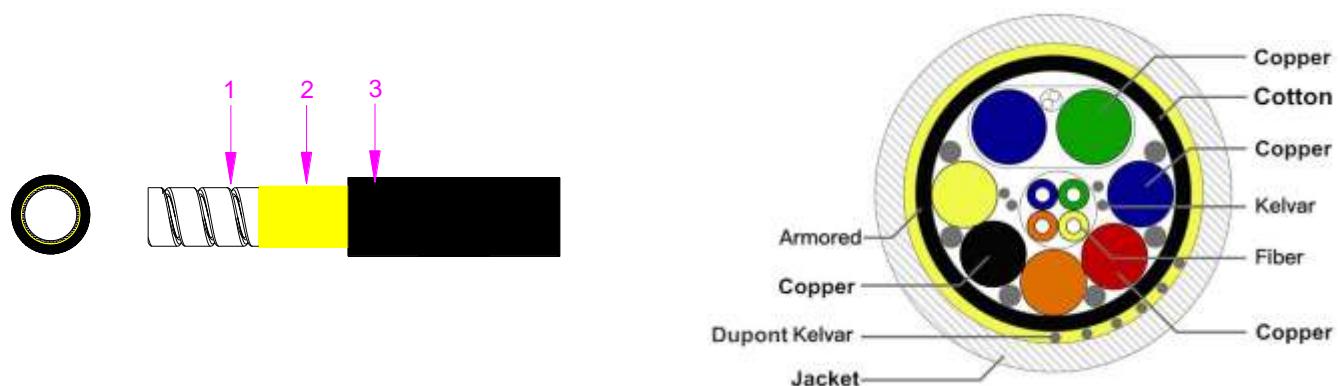
**HDMI Type A Connector Pin Assignment**

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+		

## Installation



## Hybrid Cable Profile



Cable Structure		Material/Model	Specifications
1	Metal Tube	200CU Stainless steel	4.4±0.1
2	To strengthen the unit	Dupont Kevlar	1670D*4
3	Jacket	TPU	OD 5.8±0.2 mm

Tensile(N)		Crush Resistance(N/100mm)		Bending Radius(mm)		Temperature(°C)
Long Term	Short Term	Long Term	Short Term	Dynamic	Static	-40~+80
400	800	1000	2000	10D	20D	