Premium Optic HDMI 2.1 Cables



Descriptions

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

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

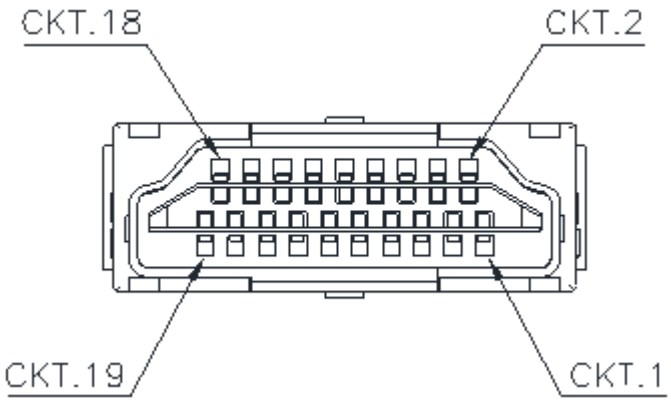
Recommended Operating Conditions

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 2.2 Fully Support bi-directional EDID and HDCP communication	
Video Bandwidth	12 Gbps/x4Channel	
Supported Resolution & Distance	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	

HDMI Type A Pin Assignment



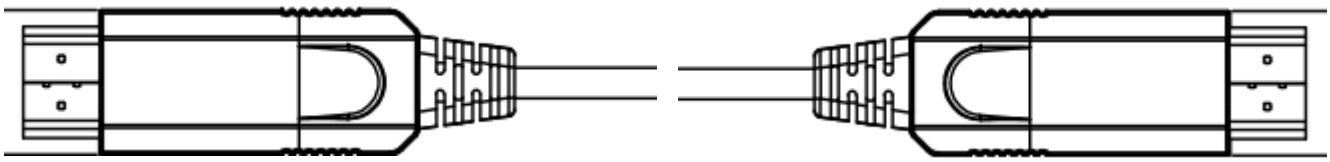
HDMI Type A Connector Pin Assignment

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+		

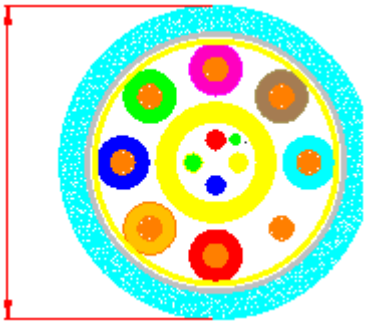
Installation

To Source, ex. DVD, PC

To Sink, ex. TV



Hybrid Cable Profile



Packing Details

5PCS/CARTON
FOR 70M to 100M

10PCS/CARTON
FOR 10M to 60M

Inner Box