SPECIFICATIONS

TA-MC40 Series

HDMI 2.1 8K A-A AOC

Descriptions

Our HDMI Active Hybrid Cable is the most competitive long-reach HDMI interconnection solution on the market. It supports HDMI Maximum Data Rate of 12Gbps total 48Gbps bandwidth with lightweight, 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, supports up to 100m maximum length, plug and play. No external power is 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 HDCP2.3/Dynamic HDR/VRR/QMS/QFT/ALLM/DSC
- Support 48GbpsBandwidth with 4Kp50/60/100/120 and 8Kp50/60
- Self-detecting function for EDID information
- Support eARC up to 20m
- No loss of signal – delivering crystal clear digital images instantly.
- Dynamic HDR formats is supported.
- Hybrid optical cable with 4XOM3fiber and 7X OFC 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

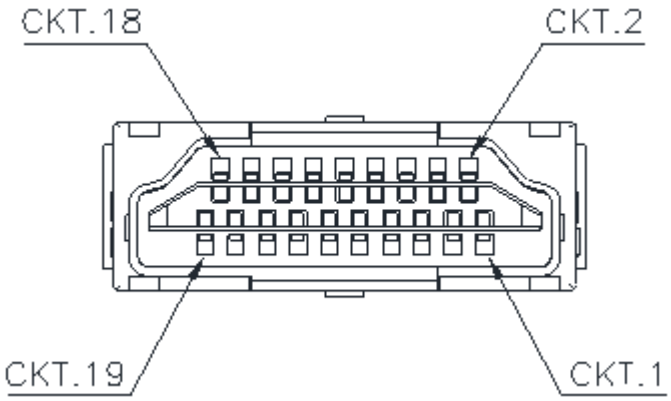
Recommended Operating Conditions

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 2.3 Fully Support bi-directional EDID and HDCP communication	
Video Bandwidth	12Gbps x 4Channel	
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	10m/15m/20m/25m/30m/40m/50m/60m/70m/80m/90m/100m Custom length available.	
Cable Outer Diameter	4.5mm±0.2	
Jacket Outer Material	PVC/CL2/CL3/CMP/LSZH/TPU(Custom)	
Cable Weight TBD	Cable Weight TBD	
Cable Color TBD	Matte Black	
Differential Input	100 ohm (typ)	
Power Consumption	250mW (max)	
Power Supply	Non external power required	

HDMI Type A Pin Assignment

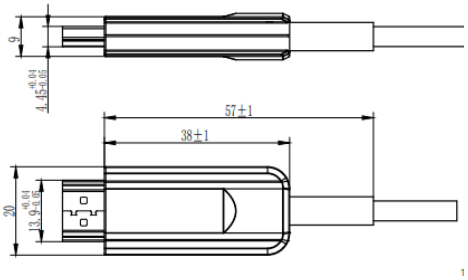


HDMI Type A Connector Pin Assignment

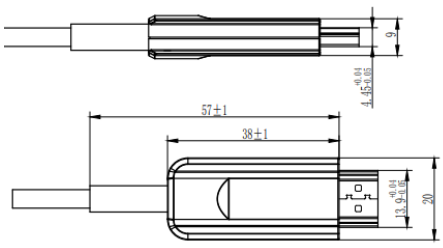
PIN	Function	PIN	Function
1	T.M.D.S. Data 2+	11	TMDS Clock Shield
2	T.M.D.S. Data 2 Shield	12	TMDS Clock-
3	T.M.D.S. Data 2-	13	CEC
4	T.M.D.S. Data 1+	14	Utility
5	T.M.D.S. Data 1 Shield	15	SCL
6	T.M.D.S. Data 1-	16	SDA
7	T.M.D.S. Data 0+	17	DDC/CEC Ground
8	T.M.D.S. Data 2 Shield	18	+5V Power
9	T.M.D.S.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

Installation

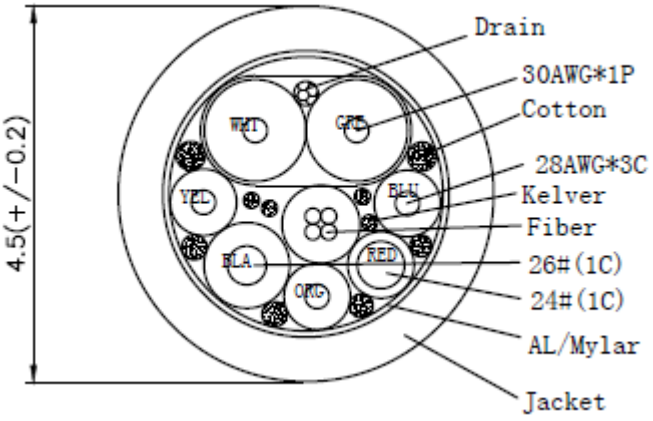
To Source, ex. DVD, PC



To Sink, ex. TV



Hybrid Cable Profile



Ordering Information

Part Number	Description
TA-MC40a	HDMI AOC, V2.1, 8K@60Hz/4K@120Hz, Suport EDID/HDCP, Length 10m
TA-MC40b	HDMI AOC, V2.1, 8K@60Hz/4K@120Hz, Suport EDID/HDCP, Length 15m
TA-MC40c	HDMI AOC, V2.1, 8K@60Hz/4K@120Hz, Suport EDID/HDCP, Length 20m
TA-MC40d	HDMI AOC, V2.1, 8K@60Hz/4K@120Hz, Suport EDID/HDCP, Length 30m
TA-MC40e	HDMI AOC, V2.1, 8K@60Hz/4K@120Hz, Suport EDID/HDCP, Length 50m
TA-MC40f	HDMI AOC, V2.1, 8K@60Hz/4K@120Hz, Suport EDID/HDCP, Length 70m
TA-MC40g	HDMI AOC, V2.1, 8K@60Hz/4K@120Hz, Suport EDID/HDCP, Length 100m

10PCS/CARTON

For 40M to 100M

Inner Box

Outer Carton

Packing Details Sheet

Item No.	Length(m)	Box Size(mm)	CTN Size(cm)	PCS/CTN	N.W. (KG/Box)	N.W. (KG)/CTN	G.W. (KG)/CTN
SHDC-9860-005	5	235*225*39	46.5*42.5*26.5	20	0.25	5.00	6.00
SHDC-9860-010	10	235*225*39	46.5*42.5*26.5	20	0.45	9.00	10.00
SHDC-9860-015	15	235*225*39	46.5*42.5*26.5	20	0.65	13.00	14.00
SHDC-9860-020	20	235*225*39	46.5*42.5*26.5	20	0.75	15.00	16.00
SHDC-9860-025	25	235*225*39	46.5*42.5*26.5	20	0.85	17.00	18.00
SHDC-9860-030	30	235*225*39	46.5*42.5*26.5	20	1.00	20.00	21.00
SHDC-9860-040	40	235*225*74	47.0*38.5*26.5	10	1.30	13.00	14.00
SHDC-9860-050	50	235*225*74	47.0*38.5*26.5	10	1.70	17.00	18.00
SHDC-9860-060	60	285*275*74	56.8*39.5*31.0	10	1.90	19.00	20.00
SHDC-9860-070	70	285*275*74	56.8*39.5*31.0	10	2.00	10.00	11.00
SHDC-9860-080	80	285*275*74	56.8*39.5*31.0	10	2.50	25.00	26.00
SHDC-9860-090	90	285*275*74	56.8*39.5*31.0	10	2.70	27.00	28.00
SHDC-9860-100	100	285*275*74	56.8*39.5*31.0	10	3.00	30.00	31.00