

SPECIFICATIONS



TA-MC41 Series HDMI 2.0 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 6Gbps 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)
- ◆ Supports a wide range of resolutions up to 4K@60Hz (color space 4:4:4) 3D and Deep color
- ◆ Plug and Play
- ◆ Supports Multi-channel audio, Dolby True HD, DTS-HD Master Audio
- ◆ Compatible with HDMI 2.0 standard:EDID,CEC,HDCP (2.2), HDR (High Dynamic Range), HEC,ARC etc.
- ◆ No loss of signal – delivering crystal clear digital images instantly.
- ◆ Reduced EMI and RFI
- ◆ Has high pulling strength and compression load
- ◆ Has Source&Display clearly printed on the connector for easy identification
- ◆ Support 18G super speed
- ◆ Hybrid optical cable with 4 fiber and 7 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

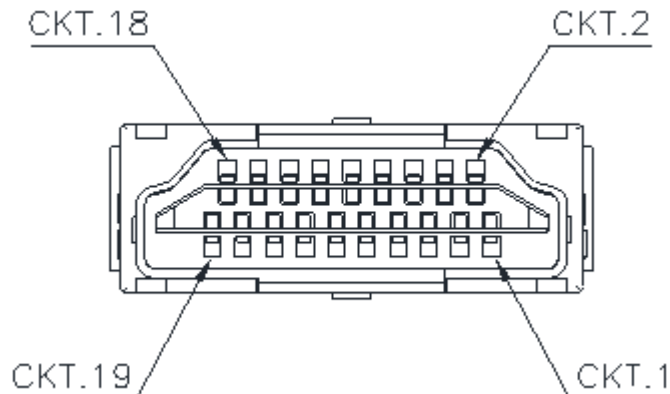
Recommended Operating Conditions

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	6 Gbps x 3Channel (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	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	Matte Black	
Differential Input	100 ohm (typ)	
Power Consumption	250mW (max)	
Power Supply	Non external power required	

HDMI Type A Pin Assignment



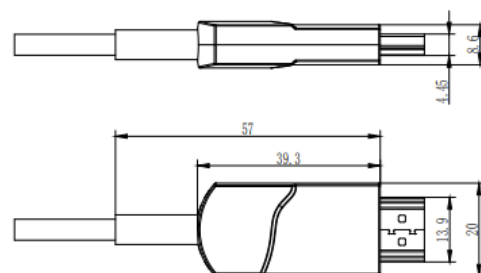
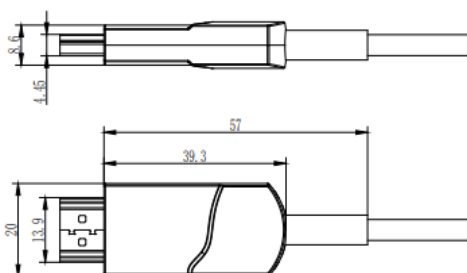
HDMI Type A Connector Pin Assignment

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+		

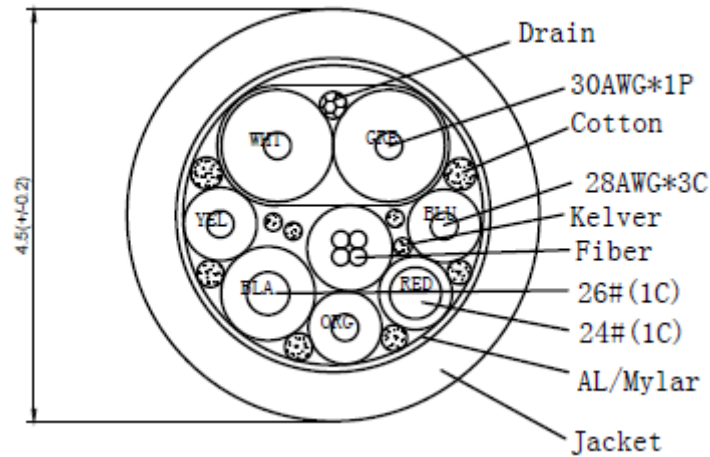
Installation

To Source, ex. DVD, PC

To Sink, ex. TV



Hybrid Cable Profile



Ordering Information

Part Number	Description
TA-MC41a/5m	HDMI AOC, V2.0, 4K 2K/60Hz, Support EDID/HDCP, Length 5m
TA-MC41a	HDMI AOC, V2.0, 4K 2K/60Hz, Support EDID/HDCP, Length 10m
TA-MC41b	HDMI AOC, V2.0, 4K 2K/60Hz, Support EDID/HDCP, Length 15m
TA-MC41c	HDMI AOC, V2.0, 4K 2K/60Hz, Support EDID/HDCP, Length 20m
TA-MC41d	HDMI AOC, V2.0, 4K 2K/60Hz, Support EDID/HDCP, Length 25m
TA-MC41e	HDMI AOC, V2.0, 4K 2K/60Hz, Support EDID/HDCP, Length 30m
TA-MC41f	HDMI AOC, V2.0, 4K 2K/60Hz, Support EDID/HDCP, Length 40m
TA-MC41g	HDMI AOC, V2.0, 4K 2K/60Hz, Support EDID/HDCP, Length 50m
TA-MC41h	HDMI AOC, V2.0, 4K 2K/60Hz, Support EDID/HDCP, Length 70m
TA-MC41i	HDMI AOC, V2.0, 4K 2K/60Hz, Support EDID/HDCP, Length 100m