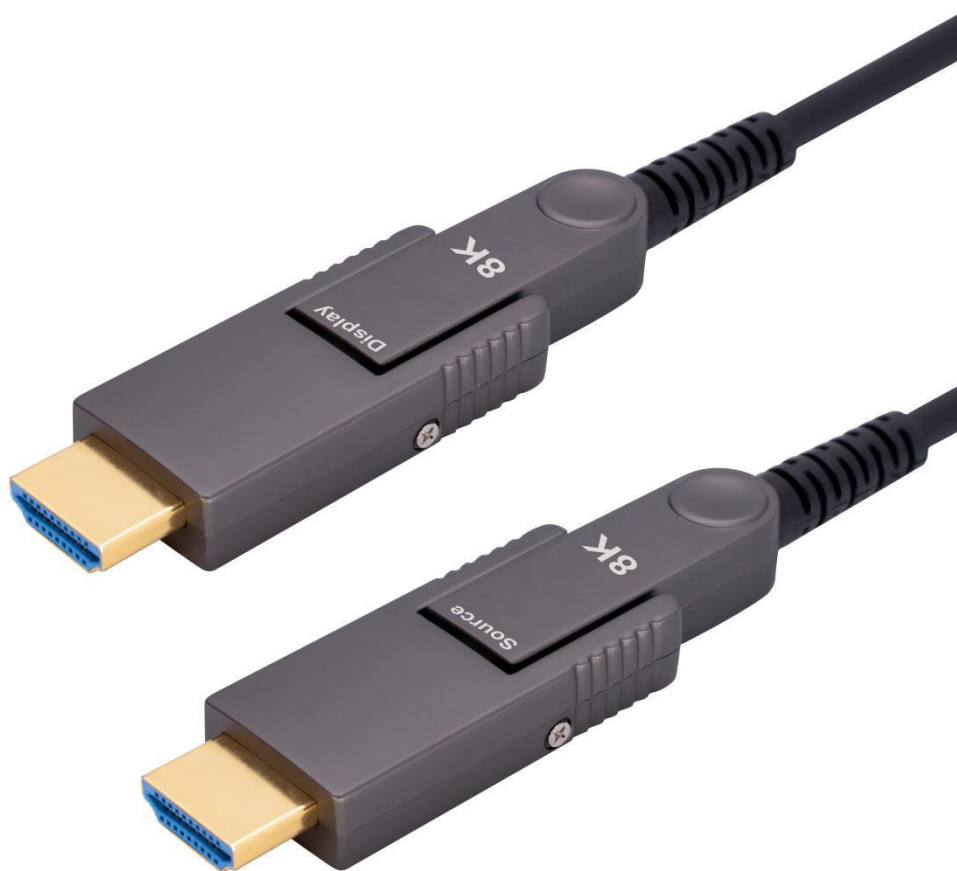


SPECIFICATIONS



TA-MC40a-D/D Series

HDMI 2.1 8K Detachable D-D AOC

Descriptions

Our new HDMI active Fiber Optic UHD Pluggable HDMI Cable is suited for critical and versatile installations. It supports HDMI Maximum Data Rate of 48Gbps 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, support up to 100m maximum length, plug and play—no external power required.

Key Features

- ◆ Compatible with HDMI 2.1 standard: EDID, CEC, HDCP2.3, Dynamic HDR, HEC, eARC etc.;
- ◆ Support 7680 x 4320 (8K)@60Hz 4:4:4 resolutions;
- ◆ Data transfer rates up to 48Gbps bandwidth with 4Kp50/60/100/120 and 8Kp50/60;
- ◆ Support DSC, VRR, QMS, QFT, ALLM;
- ◆ Backward compatible with HDMI2.0/HDMI1.4
- ◆ Self-detecting function for EDID information
- ◆ OM3 fiber technology greatly reduces EMI/RFI emissions;
- ◆ No loss of signal - delivering crystal clear digital images instantly;
- ◆ Has Source / Display clearly printed on the connector as well as tagged on the cable for easy identification;
- ◆ Includes a DC cable to optionally connect an external 5V power supply (if required, this is typically connected on the display side).

Applications

SHDC-9900 is ideal for long-distance transmission in professional AV systems, indoor and outdoor digital signage and kiosks, home theater systems, surgical theaters, facility automation systems, and whenever high-resolution video and audio are required. On the display side, the micro HDMI connector enables smooth pulling of the cable. The SOURCE end connects to the source (for example, a DVD, Blu-ray, or game console box) and the DISPLAY end to the acceptor (for example, a projector, an LCD, or a tablet device).

- ◆ 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

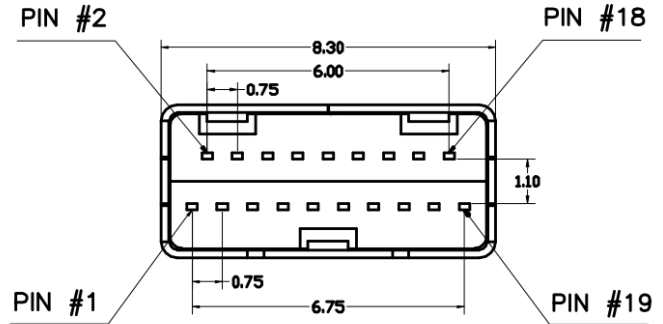
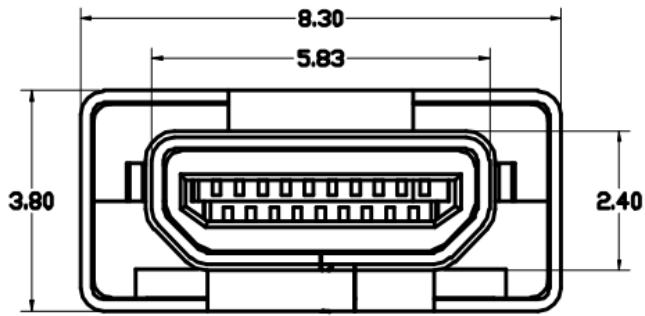
Recommended Operating Conditions

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 (Display)
HDCP & DDC	HDCP2.3 Fully Support bi-directional EDID and HDCP communication	
Video Bandwidth	12 Gbps x 4Channel (max)	
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 D (with HDMI D/Female to HDMI A/Male Adaptor)	
Connector Demension	Type D: 39.8mm x 13.9mm x 9.8mm W, D, H Type A : 44.0mm x 20.7mm x 9.8mm W, D, H Pulling Tool: 55.2mm x 17.5mm x 13mm W, D, H	
Cable Type	Hybrid type with OM3 fiber and copper wire	
Cable Length	15m/20m/30m/40m/50m/60m/70m/80m/90m/100m. Custom length available.	
Cable Outer Diameter	4.5mm	
Jacket Outer Material	PVC/CMP/LSZH(Custom)	
Cable Color TBD	Matte Black	
Differential Input	100 ohm (typ)	
Power Consumption	250mW (max)	

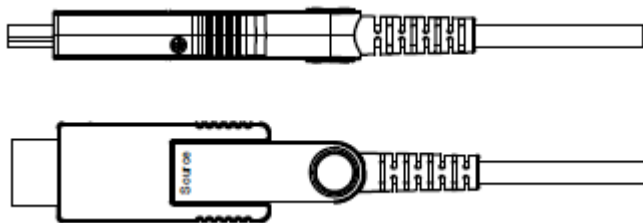
HDMI Pin Assignment



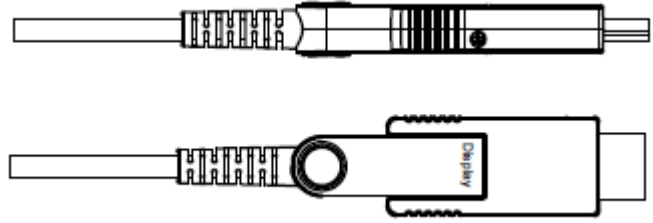
HDMI Type A Connector Pin Assignment

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

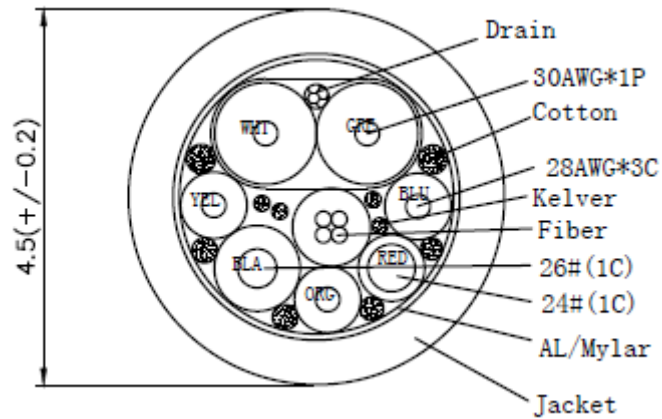


To Source, ex. DVD, PC



To Display, ex. TV

Hybrid Cable Profile



Ordering Information

Part Number	Description
TA-MC40a-D/D	HDMI2.1 D-D AOC, 8K/60Hz, Support EDID/HDCP2.3, Length 10m
TA-MC40b-D/D	HDMI2.1 D-D AOC, 8K/60Hz, Support EDID/HDCP2.3, Length 15m
TA-MC40c-D/D	HDMI2.1 D-D AOC, 8K/60Hz, Support EDID/HDCP2.3, Length 20m
TA-MC40d-D/D	HDMI2.1 D-D AOC, 8K/60Hz, Support EDID/HDCP2.3, Length 30m
TA-MC40e-D/D	HDMI2.1 D-D AOC, 8K/60Hz, Support EDID/HDCP2.3, Length 50m