

## SPECIFICATIONS



## WNHD2 Series

### HDMI 2.0 detachable A-D AOC

#### DESCRIPTIONS

Our new HDMI active Fiber Optic UHD Pluggable HDMI Cable which is suited for critical and versatile installations. It supports HDMI Maximum Data Rate 18Gbps with light weight, flexible and ultra-small long-term bending radius (20mm) 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

- ◆ Supports a wide range of resolutions up to 4K@60Hz (color space 4:4:4) 3D and Deep color
- ◆ Supports Multi-channel audio, Dolby True HD, DTS-HD Master Audio
- ◆ Is HDMI compliant: EDID, CEC, HDCP (2.2), HDR (High Dynamic Range)
- ◆ Reduced EMI and RFI
- ◆ Has high pulling strength and compression load
- ◆ Has Source / Display clearly printed on the connector as well as tagged on the cable for easy identification.
- ◆ Support 18G super speed
- ◆ Includes a DC cable to optionally connect an external 5V power supply(if required, this is typically connected on the display side .)

### Applications

WNHD2 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 display or a tablet device .

### 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

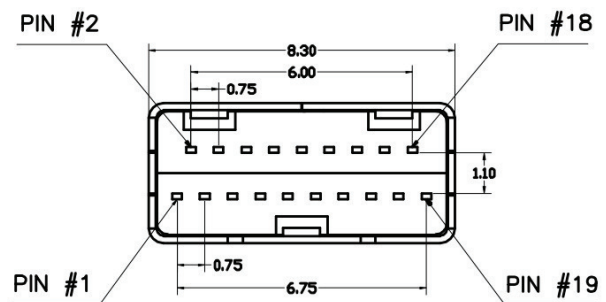
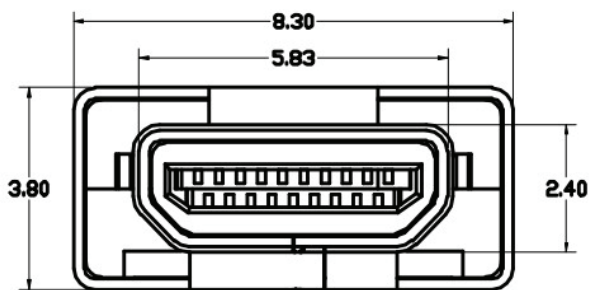
Parameter	Symbol	Min	Typical	Max	Unit
Power Supply Voltage	VCC	4.75	5.0	5.25	V
Operating Temperature	Top	0		50	°C

### Specifications

Item	Description	
Units	Transmitter (Source)	Receiver (Display)
HDCP & DDC	HDCP2.2 Fully Support bi-directional EDID and HDCP communication	

Video Bandwidth	6 Gbps /x3Channel (max)+ Clock.	
Supported Resolution & Distance	HDTV : 480p, 720p, 1080i and 1080p deep color, 4K@30Hz, 4K@60Hz(4:4:4), 3D Full 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 D with HDMI D/Female to HDMI A/Male Adaptor	
Connector Demension	Type D: 44.2mm x 12.7mm x 7.1mm W, D, H Type A : 48.2mm x 20mm x 10mm 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 (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)	

### HDMI Type A Pin Assignment



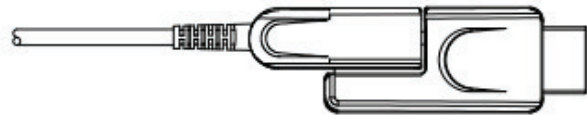
### HDMI Type A Connector Pin Assignment

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 Display, ex. TV

### Hybrid Cable Profile



**Ordering Information**

<b>Part Number</b>	<b>Description</b>
WNHD2-10	HDMI AOC, V2.0, 4Kx2K/60P, Suport EDID/HDCP, Length 10m
WNHD2-15	HDMI AOC, V2.0, 4K 2K/60P, Suport EDID/HDCP, Length 15m
WNHD2-20	HDMI AOC, V2.0, 4K 2K/60P, Suport EDID/HDCP, Length 20m
WNHD2-30	HDMI AOC, V2.0, 4K 2K/60P, Suport EDID/HDCP, Length 30m
WNHD2-40	HDMI AOC, V2.0, 4K 2K/60P, Suport EDID/HDCP, Length 40m
WNHD2-50	HDMI AOC, V2.0, 4K 2K/60P, Suport EDID/HDCP, Length 50m
WNHD2-60	HDMI AOC, V2.0, 4K 2K/60P, Suport EDID/HDCP, Length 60m
WNHD2-70	HDMI AOC, V2.0, 4K 2K/60P, Suport EDID/HDCP, Length 70m
WNHD2-80	HDMI AOC, V2.0, 4K 2K/60P, Suport EDID/HDCP, Length 80m
WNHD2-90	HDMI AOC, V2.0, 4K 2K/60P, Suport EDID/HDCP, Length 90m
WNHD2-100	HDMI AOC, V2.0, 4K 2K/60P, Suport EDID/HDCP, Length 100m