

Magenta HDMI 2.0 Active Optical Cable

MG-AOC-66x

Simple 4K60 4:4:4 Extension



OVERVIEW

The Magenta Active Optical Cable provides a simple yet powerful solution for extending high resolution over long distances. This plug and play HDMI 2.0 cable supports up to 4K60 4:4:4 with no compression or latency up to 328ft (100m) and without the need for external power and is available in UL rated Plenum (CMP), Low Smoke Zero Halogen (LSZH), or with a rugged Armored core, providing the ultimate flexibility.

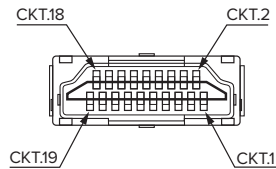
KEY FEATURES

- ▶ Up to 328ft (100m)
- ▶ No external power required
- ▶ Plug and Play
- ▶ HDMI 2.0
- ▶ HDCP support
- ▶ EDID support
- ▶ No signal loss
- ▶ 4K2Kp60 down to 480i supported
- ▶ UL rated Plenum (CMP) option available
- ▶ Low Smoke Zero Halogen (LSZH) option available
- ▶ Armored core with watertight caps available

SPECIFICATIONS

Item	Description	
Units	Transmitter (Source)	Receiver (Sink)
HDCP & DDC	HDCP 2.2 Fully Supports bi-directional EDID and HDCP communication	
Video Bandwidth	6 Gbps/x3Channel (max)+ Clock	
Supported Resolutions & 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 2.0 type A	
Cable Type	Hybrid type with OM3 fiber and copper wire	
Cable Length	10m, 15m, 20m, 25m, 30m, 40m, 50m, 60m, 70m, 100m (with +/-30cm tolerance).	
Cable Outer Diameter	4.5mm	
Jacket Outer Material	PVC (MG-AOC-661-xxx)	
	Plenum (MG-AOC-662-xxx)	
	LSZH (MG-AOC-663-xxx); EN 60332-1-2, EN 50399	
Cable Weight	TBD	
Cable Color	Black	
Maximum Tensile Load	15kg	
Minimum Bend Radius	20mm	
Differential Input	100 ohm (typical)	
Power Consumption	250mW (max)	
Power Supply	No external power required	
Operating Temperature	0-50°C	
Limited Warranty	1 year parts and labor	

HDMI Type A 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+		

Reliability Testing Report of HDMI Copper Cable and AOC

Item	Test Condition	Copper Cable	MG-AOC
Bending Test	1. Angle:+/-60°; 2. Load Test:200g; 3. Swing:speed:20cycle/min;	Limit value; 218 cycle	10000 cycle intact
Tensile Test	Test the tension limit value of the connection at SR	41.5kg	22.1kg
Load Test	Cable 100MM load test	100kg intact	100kg intact

MG - AOC - 66 x - 10			
Magenta	Active Optical Cable	Jacket	Length (m)
	Connector	A - Armored*	10* 40
	66 - HDMI 2.0	1 - Standard (PVC)	15 50
	88 - Display Port 1.4	2 - UL plenum (CMP)	20 60
		3 - LSZH	25 70
			30* 100*

* Armored only available in 10, 30 or 100m lengths