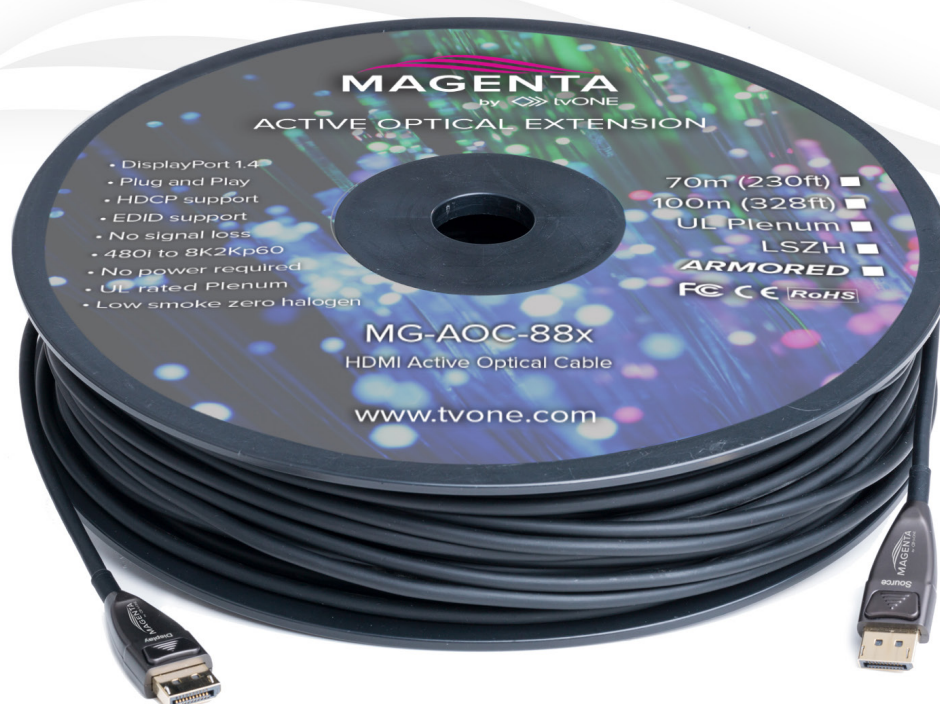


DisplayPort 1.4 Active Optical Cable

MG-AOC-88x

Simple 8K60 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 DisplayPort 1.4 cable supports up to 8K60 4:4:4 with no compression or latency up to 328ft (100m) and without the need for external power. The MG-AOC-88x is available in UL rated Plenum (CMP), Low Smoke Zero Halogen (LSZH), or with a rugged Armored core, providing the ultimate flexibility.

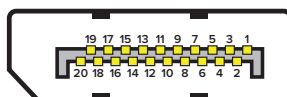
KEY FEATURES

- ▶ Up to 328ft (100m)
- ▶ No external Power required
- ▶ Plug and Play
- ▶ DisplayPort 1.4
- ▶ HDCP support
- ▶ EDID support
- ▶ No signal loss
- ▶ 8K2Kp60 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)
Standards Compliance	DisplayPort 1.4 / HBR3, HDCP 1.4 / 2.2 Fully Supports bi-directional EDID and HDCP communication
Video Bandwidth	Supports up to 8.1 Gbps per lane, 32Gbps Total
Max Color Depth	48bits
Maximum Resolution & Distance	8K @ 60hz
O/E Converter	4x 850 nm Multi-mode VCSELs 4x GaAs PIN Photo Diodes
Connector Type	20 pin DisplayPort version 1.4
Cable Type	Hybrid cable, 4x fiber and 8x copper wire
Cable Length	10m, 15m, 20m, 25m, 30m, 40m, 50m, 60m, 70m, 100m (with +/-30cm tolerance).
Cable Outer Diameter	4.8mm
Jacket Outer Material	PVC (MG-AOC-881-xxx) Plenum (MG-AOC-882-xxx) LSZH (MG-AOC-883-xxx); EN 60332-1-2, EN 50399
Cable Weight	TBD
Cable Color	Black
Maximum Tensile Load	30.5kg
Minimum Bend Radius	48mm
Power Consumption	<0.5 watt each end
Power Supply	No external power required, powered from DisplayPort source device
Operating Temperature	0-50°C
Limited Warranty	1 year parts and labor

DisplayPort 1.4



Pin 1	ML_Lane 0 (p) ^[a]	Lane 0 (positive)	Pin 11	GND	Ground
Pin 2	GND	Ground	Pin 12	ML_Lane 3 (n) ^[a]	Lane 3 (negative)
Pin 3	ML_Lane 0 (n) ^[a]	Lane 0 (negative)	Pin 13	CONFIG1	Connected to ground ^[b]
Pin 4	ML_Lane 1 (p) ^[a]	Lane 1 (positive)	Pin 14	CONFIG2	Connected to ground ^[b]
Pin 5	GND	Ground	Pin 15	AUX CH (p)	Auxiliary channel (positive)
Pin 6	ML_Lane 1 (n) ^[a]	Lane 1 (negative)	Pin 16	GND	Ground
Pin 7	ML_Lane 2 (p) ^[a]	Lane 2 (positive)	Pin 17	AUX CH (n)	Auxiliary channel (negative)
Pin 8	GND	Ground	Pin 18	Hot plug	Hot plug detect
Pin 9	ML_Lane 2 (n) ^[a]	Lane 2 (negative)	Pin 19	Return	Return for power
Pin 10	ML_Lane 3 (p) ^[a]	Lane 3 (positive)	Pin 20	DP_PWR	Power for connector (3.3 V 500 mA)

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: 20 cycle/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 - 88 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