

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), providing the ultimate flexibility.

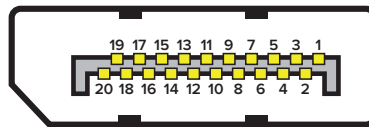
KEY FEATURES

- ▶ 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

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)	
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	

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)

SKU	DisplayPort 1.4 Active Optical Cable
MG-AOC-881-10	33ft (10m)
MG-AOC-881-15	50ft (15m)
MG-AOC-881-20	66ft (20m)
MG-AOC-881-25	82ft (25m)
MG-AOC-881-30	100ft (30m)
MG-AOC-881-40	131ft (40m)
MG-AOC-881-50	164ft (50m)
MG-AOC-881-60	196ft (60m)
MG-AOC-881-70	230ft (70m)
MG-AOC-881-100	328ft (100m)

SKU	DisplayPort 1.4 Active Plenum Optical Cable
MG-AOC-882-10	33ft (10m)
MG-AOC-882-15	50ft (15m)
MG-AOC-882-20	66ft (20m)
MG-AOC-882-25	82ft (25m)
MG-AOC-882-30	100ft (30m)
MG-AOC-882-40	131ft (40m)
MG-AOC-882-50	164ft (50m)
MG-AOC-882-60	196ft (60m)
MG-AOC-882-70	230ft (70m)
MG-AOC-882-100	328ft (100m)