

C2G Performance Series High Speed HDMI Active Optical Cables (AOC) are the perfect solution for extending HDMI signals in classrooms, meeting spaces, and other commercial applications requiring high speed HDMI features and video resolutions up to 4K (4096 x 2160) at 60Hz. The cable's fiber strand construction reduces the risk of EMI/RFI, making performance stable when used in high interference environments such as data centers, surgical theaters, or manufacturing facilities where high resolution and consistent displays are critical.

We have engineered our HDMI AOCs with quality components to give a robust design and enhanced performance, ideal for installation needs that are beyond the length limitations of standard HDMI copper cabling. Adding a thicker wire gauge and Kevlar®, we improved the cable's pull strength and overall structural integrity. The shielding in these cables optimizes the EMC, preventing unwanted electromagnetic interference and electrostatic discharges, contributing to the long-term reliability of the connected system. The cable jacket meets the fire code requirements for installation within plenum spaces, like a dropped ceiling. The AOC draws power from the HDMI source device. If additional power is needed, an integrated USB-C power pigtail is included on the display end to offer an external power option to maximize compatibility. The use of HDMI 2.1 grade components in the cable confidently improves the operation of HDMI 2.0 applications – enhancing video experiences with higher resolutions, increased speeds, and sharper images at distances far beyond traditional HDMI cabling.

Extensive compatibility and verification tests have been done with various source devices and displays to validate that these HDMI AOCs will withstand real-world applications and scenarios. HDMI AOCs can only run in one direction. The connectors have molded labeling for source and display, so there is no confusion with this directional cable. The source connector end even has a tag on the cable as an extra reminder.

With these being a part of the C2G Performance Series, they include:

- Commercial grade connectors that feature compact overmolding for high-density environments
- Integrated finger grips on the top, bottom, and sides for easy insertion and removal
- Gripping connector shell has 2x greater port retention to keep your devices connected
- Gold plated connectors on the cable allow for better shielding, increased electrical conductivity, and durability

**Note:** Use a USB-C to USB-A cable for additional power. Connect the USB-C to USB-A cable to the integrated USB-C power pigtail on the display end of the cable and power source. We recommend using C26 parts <u>28871</u> and <u>22335</u>.



# Additional Technical Specifications

## **Electrical Specifications**

• Supply Voltage: 5V

• Signal Bandwidth: 18Gbps @4K 60Hz, 4:4:4

#### HDMI Connector:

• Voltage Rating: 40V AC

• Withstanding Voltage: 300 V DC/0.01s

• Current: 0.5A Min.

• Insulation Resistance: 10Mega0hms Min

• Contact Resistance: 30 Milliohms Max

### USB-C Pigtail Connector:

Voltage Rating: 20V MaxWithstanding Voltage: 100V ACCurrent: 5A Min for VBUS

Insulation Resistance: 100 Megaohms MinContact Resistance: 40 Milliohms Max

#### Physical Characteristics

- Cable Bend Radius:
  - $\circ \ \ \text{(C2G41480-5 ONLY): Min Bend Radius (No Load): 15mm, Min Bend Radius (Under Load): 70mm } \\$
- (C2G41486-91 ONLY): Min Bend Radius (No Load): 20mm, Min Bend Radius (Under Load): 75mm
- Connector 1: HDMI Male/Main Cable, Shell: Gold Flash Plating Over All, Housing: Thermoplastic, Blue
  - $\circ \ \, \text{Cable Tensile Strength: Short Term Load: } 500\text{N for 10 minutes; Long Term Load: } 250\text{N for 30 Minutes}$
  - HDMI Insertion Force: 10kgf Max; Withdraw Force: 4kgf Min.
- Connector 2: USB-C Female/ Power Pigtail Adapter, Contact: Gold Plated, Nickel Plating Over All, Housing: LCP, Black
  - o Outer Diameter: 2.4mm±0.15mm
  - Pigtail Tensile Strength: 6kgf; Pull force between the HDMI Overmold & Pigtail: 5kgf, Pull Force Between HDMI Overmold and USB Overmold: 5kgf
  - o USB-C insertion Force: 5-20N; Withdraw Force: 8-20N

- Outer Jacket: PVC, .40mm Thickness, Black, Rating: CMP
- Operating Temperature: 0°C 50°C; 75% Relative Humidity, Non-Condensing
- Storage Temperature: -40°C 100°C; 75% Relative Humidity, Non-Condensing
- Cable Marking: High Speed HDMI Cable E468039 (UL) CMP c(UL) 75°C
- Product are CE Marked and conforms to 2011/65/EU ROHS2

# Features & Benefits

Supports all HDMI 2.0 features including resolutions up to 4K (4096 x 2160) at 60hz, which means higher quality video for viewing your screen content

Plenum CMP rated jacket, so you can safely run the cable inside plenum spaces, meeting the requirements for an installation in a commercial space

Integrated finger grips on the connectors for easy insertion and removal

Gripping connector shell for 2x greater port retention

Gold plated connectors for increased electrical conductivity and enhanced durability

Uni-directional cable with source connector labeled and tagged to easily differentiate from the labeled display connector

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Specifications				
General Info				
Product Line	C2G	Color	Black	
UPC Number	757120414865	Country Of Origin	China	
Application Sector	Residential, Commercial	Туре	Active Device, Cable	
Dimensions				
Cable Length	100 ft			
Listing Agencies / 3rd Party	Agencies			
CE	Yes			
Additional Information				
Prop 65 Warning Required	Yes	Prop 65 Warning Language	Cancer and Reproductive Harm	
Technical Information				
Jacket Material	PVC (Polyvinyl Chloride)	Video Resolution	4K 60Hz	
Bend Radius	75 mm	Cable Type	Active Optical Cable (AOC), High Speed HDMI, Video	
Jacket Rating	Plenum CMP-Rated	Data Transfer Rate	18 Gbps	
Input Voltage	5V	Adapter Rear	HDMI Male, USB-C Female	
Adapter Front	HDMI Male	Operating Temperature	0 C, 50 C	
Storage Temperature	-40 C, 100 C			