

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 C2G 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: 10MegaOhms Min
- Contact Resistance: 30 Milliohms Max

USB-C Pigtail Connector:

- Voltage Rating: 20V Max
- Withstanding Voltage: 100V AC
- Current: 5A Min for VBUS
- Insulation Resistance: 100 Megaohms Min
- Contact Resistance: 40 Milliohms Max

Physical Characteristics

- Cable Bend Radius:
 - (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
 Cable Tensile Strength: Short Term Load: 500N for 10 minutes; Long Term Load: 250N 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
 - 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
 - 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 • Plenum CMP rated jacket, so you can safely run the cable inside plenum 60hz, which means higher quality video for viewing your screen content

spaces, meeting the requirements for an installation in a commercial space

• Integrated finger grips on the connectors for easy insertion and removal

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

• Gripping connector shell for 2x greater port retention

• Gold plated connectors for increased electrical conductivity and enhanced durability

Specifications

General Info

| Product Line | C2G | UPC Number | 757120414872 |
|--------------------------|--------------------------|--------------------------|---|
| Country Of Origin | China | Application Sector | Residential, Commercial |
| Туре | Active Device, Cable | | |
| Dimensions | | | |
| Cable Length | 125 ft | | |
| 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 | | |