C2G®

A brand of **legrand**®

C2G Performance Series High Speed HDMI Active Optical Cables (AOC)

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.

OVERVIEW

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.

ITEM   DESCRIPTION

C2G41480-91   C2G Performance Series High Speed HDMI Active Optical Cables (AOC)

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 28871 and 22335.

FEATURES

— 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 rated jacket, so you can safely run the cable inside of a wall
  and have a clutter free, clean look

— 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

— Directional cable with source connector labeled and tagged to easily differentiate
  from the labeled display connector

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):
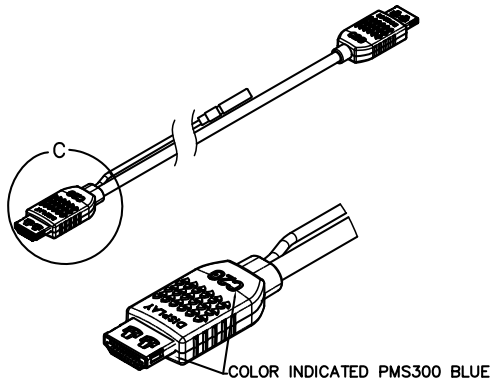 20mm, Min Bend Radius (Under Load): 75mm

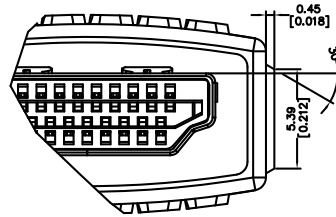### Connector 1: HDMI Male/Main Cable, Shell: Gold Flash Plating Over All, Housing: Thermoplastic, Blue

— 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
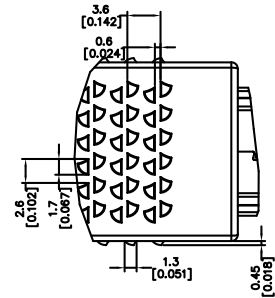
— Outer Diameter: 2.4mm±0.15mm

— 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

— 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

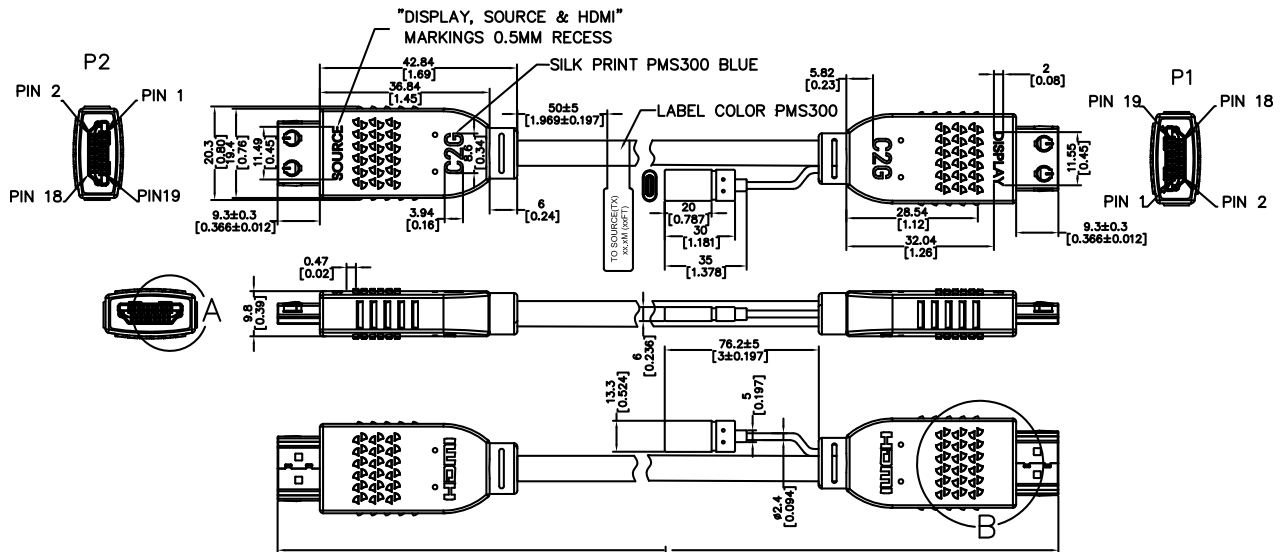COLOR INDICATED PMS300 BLUE

DETAIL C
SCALE 2:1.5

DETAIL A
SCALE 8:1

1. Chipset Infomation:
   VCSEL DRIVER IC: RT183
   TRANSIMPEDANCE AMPLIFIER: RT182

2. Firmware Infomation : N/A
   (NO firmware required for this product)

DETAIL B
SCALE 4:1

"DISPLAY, SOURCE & HDMI"
MARKINGS 0.5MM RECESS

SILK PRINT PMS300 BLUE

LABEL COLOR PMS300

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SIMPLIFIED CONNECTIVITY

USA 800.506.9607 | c2g.com | legrandav.com | customer-service@c2g.com

EMEA +31 495 580 840 | c2g.com/uk | legrandav.com | c2g.emea@av.legrand.com