

50m (164ft) DisplayPort 1.4 Hybrid Active Optical Cable (AOC), CMP Plenum, 8K 60Hz, 32.4Gbps, Active DisplayPort Cable

Product ID: 8K-AOC-50M-DP-CABLE



Route this DisplayPort 1.4 Hybrid Active Optical Cable (AOC) through office plenum spaces for long-distance transmission of 8K 60Hz video and high-quality audio without requiring external power.

This active DisplayPort cable is designed for long runs, featuring a hybrid construction that offloads low-bandwidth signals such as EDID and HDCP over copper conductors while preserving full 8K 60Hz video bandwidth across the fiber optic cores. Shielded copper conductors and fiber inner cores greatly reduce EMI, ensuring optimal signal quality over extended distances.

The 8K DisplayPort Fiber Optic Cable supports full DP 1.4 specifications:

- High Bit Rate 3 (HBR3) supporting up to 32.4Gbps total bandwidth for higher refresh rates
- High Dynamic Range (HDR10) for higher contrast ratio and vibrant, cinematic picture quality
- DSC-compressed video up to 8K 60Hz/4K 240Hz 4:4:4 8-bit over long distances
- Uncompressed video resolutions up to 4K 120Hz 4:4:4 8-bit
- Display Stream Compression 1.2 (DSC) for maximum resolution output
- Forward Error Correction (FEC) to manage data transmission errors
- High-Bandwidth Digital Content Protection (HDCP 2.3) for a secure connection between source and display

Install this plenum-rated DisplayPort 1.4 cable for compliant runs through ceilings and walls, where a CMP-rated jacket with low-smoke and flame characteristics is required. Route through plenum spaces within commercial buildings, including in-wall and overhead pathways with tight bend requirements. The optical fiber core is reinforced with Aramid strands to add tensile strength during pulls, and is rated for over 6,000 bending cycles at 120 degrees. This helps reduce the risk of damage when navigating tight spaces that require multiple bends during installation. The 4.8mm (0.19in) cable outer diameter is flexible and slimmer than typical passive DisplayPort cables, making it

suitable for installation in space-constrained environments.

Please Note: This cable is unidirectional and must be installed in a specific direction. Please refer to the SOURCE and DISPLAY labels on the DisplayPort connectors to ensure that each end corresponds with the correct hardware.

Certifications, Reports and Compatibility



Applications

- Deliver 8K 60Hz video over longer distances with minimal signal degradation
- Ideal for use in plenum spaces in buildings

Features

- Designed for Long Range: Enable DisplayPort runs beyond the limits of passive cables with an active optical DisplayPort 1.4 cable designed for 8K 60Hz HDR video with DSC 1.2 and HBR3; Deliver immersive sound quality with 32-channel audio and 7.1 surround formats
- Install Confidently in Plenum Spaces: Route this cable through ceilings and plenum spaces requiring CMP-rated, flame-resistant jackets; Aramid fiber-reinforced construction withstands repeated bends, and latching DP connectors minimize accidental disconnects
- Identify Specs Instantly: Etched DP 1.4 specs on each Quick ID connector remove guesswork and provide peace of mind by confirming the required bandwidth on long cable runs; Clear Source and Display markings ensure correct unidirectional installation
- Ensure Reliable Video in Extended Runs: 32.4Gbps DisplayPort 1.4 supports uncompressed resolutions up to 8K 30Hz / 4K 120Hz / 2K 240Hz with HDR and HDCP 2.3; Supports DSC 1.2a compressed resolutions up to 8K 60Hz / 5K 144Hz / 4K 240Hz
- The IT Pro's Choice: Our digital display cables are rigorously lab-tested for signal integrity, durability, and compatibility across HDMI, DisplayPort, USB-C, and legacy interfaces; Backed by free lifetime 24/5 multi-lingual technical assistance

General

UPC	065030926751
Warranty	2 Years

Special Notes / Requirements

Special Notes	This DisplayPort Cable is unidirectional with identified connectors for Source and Display. Please ensure that the HDMI connector labelled with "Display" is connected to the Display, TV, or Projector.
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Power

Power Source	Bus Powered
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Physical & Environmental

Color	Black
Material	Zinc Alloy
Connector Style	Straight
Wire Gauge	28/30 AWG
Cable Length	164.0 ft [50 m]
Cable OD	0.2 in [4.8 mm]
Product Length	164.1 ft [50.0 m]
Product Width	0.8 in [21.5 mm]
Product Height	0.5 in [12.7 mm]
Weight of Product	3.1 lb [1.4 kg]
Operating Temperature	0C to 40C (32F to 104F)
Storage Temperature	-20C to 70C (-4F to 158F)
Humidity	10%~90% RH

Performance

HDR Support	HDR10
Maximum Data Transfer Rate	32.4Gbps
Insertion Rating	Rated beyond 10,000 Insertion Cycles
MTBF	Rated beyond 10,000 Insertion Cycles
Audio Specifications	DisplayPort - 32 Channel Audio DisplayPort - 7.1 Channel Audio

Maximum Digital Resolutions	Uncompressed: Up to 8K 30Hz / 4K 120Hz / 2K 240Hz With DSC 1.2a: Up to 8K 60Hz / 5K 144Hz / 4K 240Hz
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Video Revision	DisplayPort 1.4
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Hardware

Active or Passive Adapter	Active
Connector Plating	Gold
Cable Jacket Material	PVC (Polyvinyl Chloride)
Cable Shield Material	Aluminum-polyester foil
Fire Rating	CMP (Plenum)
Cable Type	Hybrid Active Optical Cable (AOC)
Chipset ID	SL86723 SL86713

Packaging & In-the-Box

Included in Package	1 - 50m Active Optical DisplayPort Cable
Package Width	10.8 in [27.4 cm]
Package Depth	11.2 in [28.5 cm]
Package Height	2.9 in [74 mm]
Shipping (Package) Weight	2.7 lb [1.2 kg]

Connector(s)

Connector 1 (Quantity)	1
Connector 1	DisplayPort
Connector 2 (Quantity)	1
Connector 2	DisplayPort

****Product appearance and specifications are subject to change without notice.***