

YDSAOC-32G-USB-CM-DP-AM**USB 3.2 Type-C to DP 1.4 32.4Gbps Active Fiber Optical Extension Cable****Overview**

YDSAOC-32G-USB-CM-DP-AM is a high-performance USB-C to DisplayPort 1.4 Active Optical Cable (AOC) engineered for professional-grade video and audio transmission. Using a hybrid fiber/copper construction, it extends ultra-high-definition signals up to **20 meters (about 60 ft)**, which copper cables cannot reliably achieve.

**Key Capabilities**

- ◆ **Video:** Supports up to 8K @ 60Hz (7680 × 4320, 4:2:0) and 4K @ 60Hz, along with 4K 30Hz, 1080p, 1080i, and 720p
- ◆ **Data rate:** 32.4 Gbps bandwidth per DisplayPort 1.4 specification
- ◆ **Audio:** Up to 32 audio channels with 1536 kHz sampling, supporting PCM 8-Channel, DTS -HD, and Dolby Digital True HD Surround Sound
- ◆ **Enhanced visuals:** HDR, BT.2020 colorimetry, 21:9 cinema aspect ratio, dual video stream delivery
- ◆ **Mode flexibility:** Supports both mirror and extend display modes

Design & Durability

- ◆ Hybrid fiber/copper build delivers near-zero EMI/RFI, providing a radiation-free, stable signal
- ◆ No external power required (power delivered over the cable); ultra-low power consumption
- ◆ Slim, lightweight, and highly flexible with a tight bend radius for easy routing in tight spaces
- ◆ Zinc alloy connectors and latching design for durability and to prevent accidental disconnection
- ◆ Fully plug-and-play — no drivers or software needed



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Compatibility

- ◆ Supports USB-C DisplayPort Alternate Mode and is backward compatible with DisplayPort 1.2 devices
- ◆ Works with laptops (MacBook, Dell XPS 15), tablets (iPad Pro), phones, monitors, projectors, TVs, and more

Customization

Up to 20m maximum length; custom lengths, logos, and packaging available on request

Applications

- ◆ **Video conferencing:** Compatible with Logitech Rally Bar/Camera/Tap, Yealink MeetingBar A20/A30/A50, Poly Studio X, Bose Videobar VB1, Crestron Videobar 70
- ◆ **Professional AV & Digital Signage:** Media players, control systems, interactive displays, LED video walls
- ◆ **Medical imaging & healthcare:** Ultrasound systems, medical cameras, diagnostic workstations
- ◆ **Industrial & machine vision:** Factory automation, AI vision inspection, robotics
- ◆ **Broadcasting & live streaming:** 4K capture devices, PTZ cameras, streaming workstations
- ◆ **VR/AR & gaming:** Long-distance high-speed connections for VR headsets
- ◆ **Other uses:** USB-C docks, SSD enclosures, NAS, home theater, security monitoring, conference rooms, educational settings, mass transit

Key Takeaway:

This AOC is ideal for environments requiring long-distance, uncompromised Ultra HD transmission without on-site power or cabling clutter, delivering exceptional reliability and picture/audio quality in electromagnetically complex settings.

www.YDSAOC.com sales@ydsaoc.com Phone (WhatsApp, WeChat): +86-166 0302 9616

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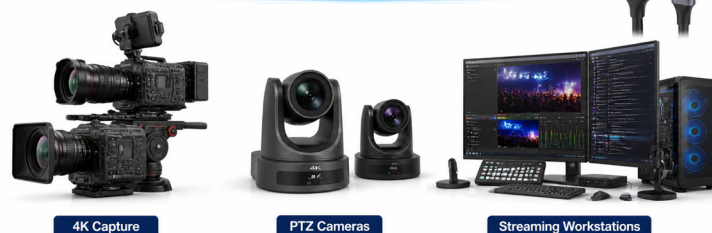
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Key Specifications

YDSAOC Model Number	YDSAOC-32G-USB-CM-DP-AM
Order Part Numbers	YDSAOC-32G-USB-CM-DP-AM-1003 YDSAOC-32G-USB-CM-DP-AM-50015 YDSAOC-32G-USB-CM-DP-AM-100030 YDSAOC-32G-USB-CM-DP-AM-150045 YDSAOC-32G-USB-CM-DP-AM-200060
Length	1m(3ft), 5m(15ft), 10m(30t), 15m(45ft). 20m(60ft)
Maximum Support Length	up to 20m(60ft)
Maximum Data Speed	up to 32.4Gbps (8.1Gbps per channel)
Full Feature AV Functions	HPD, HDCP, HDR
Maximum Resolutions	8K 60Hz, 4K 60Hz, 4K 30Hz, 1080p, 1080i, 720p
Connector A (Source)	USB 3.2 Type-C Male
Connector B (Display)	DisplayPort 1.4 Type-A Male
USB Protocols	USB Type-C Conversion to DP ALT Mode
Support Functions	DP: HBR3, DisplayPort 1.4: 32.4 Gbps
Cable Diameter	4.8mm
Cable Jacket Type	PVC
Cable Color	Black
AOC Constructions	Hybrid, 4x Optical Fiber, 5x Copper Wire
Minimum Bending Radius	50mm
Operating Temperature	0°C to 70°C
Storage Temperature	-40°C to 85°C
Installation Direction	One Way Direction. USB (Source) to DP 1.4 (Display)
Power Connect	No External Power is Required

YDSAOC

Broadcasting & Live Streaming



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Why Choose Fiber Optic USB-C Cable

Long Range

Fiber optic for stable long-distance
signal transmission

Full-Featured USB-C Active Optical Cable

15m

Full-Featured USB-C Copper Cable

2m

Full-Featured USB-C Copper Cable

5m

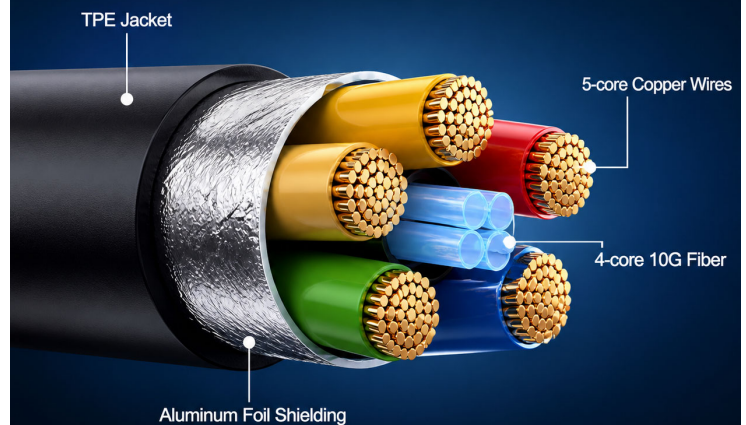
Power-Only USB-C Copper Cable

2m



10G Fiber: Zero Radiation Anti-Interference

Hybrid fiber-copper design for stable, interference-free signals.



Internal structure is a render, refer to actual product.

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Widely Compatible with USB-C Devices



Machine Vision



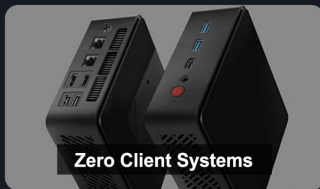
Industrial Printing



Security & Surveillance



Digital Signage & Video Walls



Zero Client Systems



Remote Storage Systems

8K Ultra HD Screen Mirroring

Up to 8K@60Hz, 4K@144Hz/120Hz Resolution



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Zinc Alloy Shell



Sturdy Connector



Tinned Copper Core



Flexible Cable Body

Tear-Resistant & Durable



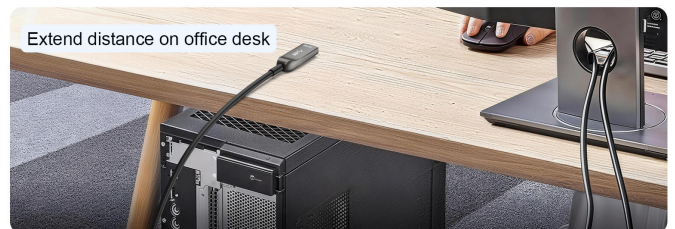
Connect to printer



Connect to camera



Extend distance for digital devices



Extend distance on office desk

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ONE CABLE. ENDLESS POSSIBILITIES.

USB-C to DisplayPort Cable – Connect What Matters

1 Video conferencing

- Compatible with
- Logitech Rally Bar/Camera/Tap
- Yealink MeetingBar A20/A30/A50
- Poly Studio X
- Bose Videobar VB1
- Crestron Videobar 70



2 Professional AV & Digital Signage

- Media players
- Control systems
- Interactive displays
- LED video walls



3 Medical imaging & healthcare

- Ultrasound systems
- Medical cameras
- Diagnostic workstations



4 Industrial & machine vision

- Factory automation
- AI vision inspection
- Robotics



5 Broadcasting & live streaming

- 4K capture devices
- PTZ cameras
- Streaming workstations



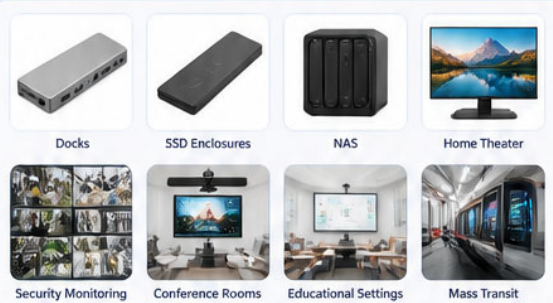
6 VR/AR & gaming

- Long-distance high-speed connections for VR headsets



7 Other uses

- USB-C docks
- SSD enclosures
- NAS
- Home theater
- Security monitoring
- Conference rooms
- Educational settings
- Mass transit





YDSAOC-32G-USB-CM-DP-AM

USB-C to DisplayPort 1.4 Active Optical Cable (AOC)



KEY CAPABILITIES



Video: 8K @ 60Hz, 4K @ 60Hz



Data Rate: 32.4 Gbps



Audio: Up to 32 channels



Cable Length: Up to 20 meters



APPLICATIONS



Video Conferencing



Professional AV & Digital Signage



Medical Imaging & Healthcare



Industrial & Machine Vision



Broadcasting & Live Streaming



VR/AR & Gaming



DESIGN & DURABILITY



Hybrid Fiber/Copper Construction



Zero EMI/RFI



No External Power Required



Zinc Alloy Connectors



Plug-and-Play



COMPATIBILITY



USB-C DisplayPort Alternate Mode



Backward Compatible with
DisplayPort 1.2



Works with Laptops, Tablets,
Phones, Monitors, Projectors, TVs

8K

ULTRA HIGH
RESOLUTION

Stunning clarity up to 8K @ 60Hz

32.4 Gbps

HIGH BANDWIDTH
PERFORMANCE

Uncompressed, high-speed
signal transmission



RELIABLE & STABLE
CONNECTION

Active Optical Technology
for long-distance performance

1. DisplayPort 1.4



2. Mini DisplayPort



3. HDMI 2.1



4. Mini HDMI (Type C)



5. Micro HDMI (Type D)



6. DVI-D



7. VGA



8. USB-C



9. Thunderbolt 4
(USB-C form factor,
40 Gbps) ⚡



10. Toslink



Row 1 - Legacy/USB 2.0 Connectors



USB Type A



USB Type B



USB Mini A



USB Mini B



USB Micro A



USB Micro B

Row 2 - Modern Connectors



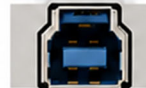
USB Type C



USB Micro B 3.0



USB 3.0 Type A



USB 3.0 Type B



USB 3.0 Micro B

Applications of Active Optical Cable (AOC)

High-speed, long-distance connectivity across diverse industries.



1 Traffic Monitoring

Uninterrupted connectivity for real-time traffic data, safety and efficiency.



2 Security & Surveillance

HD/4K/8K video support, effective monitoring without downtime.



3 Control Rooms

Ultra-high bandwidth for instantaneous data and video switching.



4 Healthcare

EMI/RFI immunity ensures reliable transmission in medical environments.



5 Education

Connectivity in large lecture halls, overcoming copper cable limits.



6 Digital Signage

High-quality displays with consistent transmission of information.



7 Conference Rooms

Plug-and-play design makes connectivity easy for presenters.



8 Government Campuses

Thinner and more flexible than copper, reducing cable clutter.



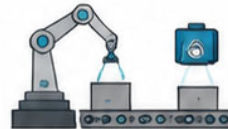
9 USB4 Applications

Extends reach while maintaining power and signal integrity.



10 Audio Visual Entertainment

Superior signal quality for home theaters and gaming.



11 Industrial & Machine Vision

Durable, high-performance for automated inspection.



12 Broadcast Systems

High bandwidth and low latency for seamless content delivery.



13 Simulation Systems

Real-time transmission for realistic training.



14 Data Centers & HPC

Pivotal for high-performance computing and extensive configurations.



15 Consumer Electronics & IT

High-res displays, VR devices, and high-bandwidth apps.



16 Aerospace, Defense & Automotive

High-speed, robust connectivity for critical sectors.

Core Benefits



Reliability



Long Distance



EMI Immunity



High Bandwidth



Flexible Installation



Power Delivery



Plug-and-Play