



YDSAOC-10G-USB32-AM-AF 10Gbps Active Fiber Optical USB 3.2 Extension Cable

Overview

YDSAOC 10Gbps Active Fiber Optical USB 3.2 Extension Cable

USB 3.2 AOC (Type-A Male to Type-A Female) fuses fiber optic technology with USB connectivity to meet the growing demand for high-bandwidth connections. By replacing traditional copper cabling, it overcomes distance and interference limitations while delivering reliable, high-performance data transmission.



Key Features

- ♦ **High Bandwidth** – Compliant with the latest USB 3.2 standard, supporting SuperSpeed data rates up to 10Gbps
- ♦ **Long-Distance Transmission** – Delivers lossless signals over a maximum length of 50 meters
- ♦ **Backward Compatible** – Works with USB 3.2 Gen 2, USB 3.1 Gen 2, USB 3.0, 2.0, and 1.1 devices
- ♦ **On-Cable Power** – Supplies up to 5V / 900mA to the remote device; hybrid fiber/copper design requires no external power source
- ♦ **Easy Installation** – Plug-and-play on both ends with unidirectional design
- ♦ **EMI/RFI Resistance** – Near-zero electromagnetic/radio-frequency interference profile for a safe, radiation-free environment
- ♦ **Customizable** – Options for custom length, logo, and packaging (up to 50m)

Intended Applications

- ♦ Machine Vision & Camera Link
- ♦ Medical Imaging Equipment
- ♦ Conference Room & Video Conference Systems
- ♦ Digital Signage & LED Signboards
- ♦ Home Theater, Blu-ray, 3D Video, Projectors & Set-top Boxes
- ♦ Radio & TV Broadcast Stations



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- ◆ Airplane On-board Video Systems
- ◆ Security Monitoring Systems
- ◆ DVR & Game Console Monitoring
- ◆ Gaming PCs, Hard Drives, Scanners, Touch Screens, Webcams, Access Control, Mobile Terminals

Ideal For

Environments requiring extended transmission distances without on-site power, where high reliability in electromagnetically complex settings is essential.

Key Specifications

YDSAOC Model Number	YDSAOC-10G-USB32-AM-AF
Order Part Numbers	YDSAOC-10G-USB32-AM-AF-1003 YDSAOC-10G-USB32-AM-AF-50015 YDSAOC-10G-USB32-AM-AF-100030 YDSAOC-10G-USB32-AM-AF-200060 YDSAOC-10G-USB32-AM-AF-300090
Length	1m(3ft), 5m(15ft), 10m(30t), 20m(60ft). 30m(90ft)
Maximum Support Length	up to 50m(150ft)
Maximum Data Speed	up to 10Gbps
Connector A	USB 3.2 Type-A Male
Connector B	USB 3.2 Type-A Female
USB Protocols	USB 3.2 Gen 2, USB 3.1 Gen 2, USB 3.0, USB 2.0
Support Functions	Data Transfer, Power Transfer 5V/900mA
Cable Diameter	4.8mm
Cable Jacket Type	PVC
Cable Color	Black
AOC Constructions	Hybrid, 2x Optical Fiber, 4x Copper Wire
Minimum Bending Radius	50mm
Operating Temperature	0°C to 70°C
Storage Temperature	- 40°C to 85°C
Installation Direction	Bidirectional, No Check on Directions
Power Connect	No External Power is Required

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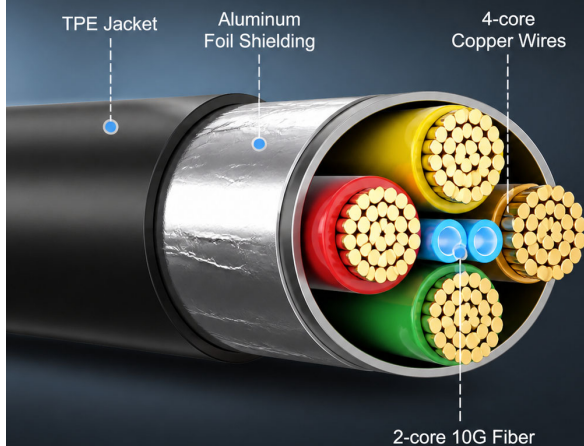
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10G Fiber: Zero Radiation Anti-Interference

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



Note: Internal structure is a render, refer to actual product.

Zinc Alloy Shell: Effectively Protects the Module

Adopts gun-gray zinc alloy shell with exquisite craftsmanship. It boasts high hardness and long-lasting durability, offering stronger protection for internal modules.



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Fiber Optic Extension Cable - Product Features

USB 3.2 Fast Transmission: 50m transmission with no delay, no radiation, and anti-interference



1. USB 3.2 Fast Transmission
10Gbps high-speed bandwidth for fast and stable data transfer



2. No Delay Over Long Distances
50m length; optical signals resist interference for delay-free transmission



3. No Radiation & Anti-Interference
Fiber optic transmission generates no radiation and resists electromagnetic interference



4. Damage-Free Bending
Bending radius over 20mm results in nearly zero signal loss



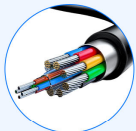
5. Slim & Flexible Cable
4.8mm cable diameter; 10N tensile strength capacity, 20N compression strength capacity



Zinc Alloy Shell



Sturdy Connector



Tinned Copper Core



Flexible Cable Body

Tear-Resistant & Durable



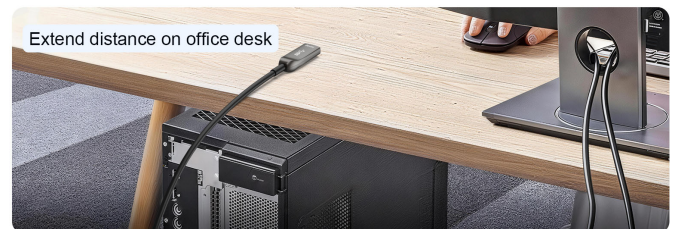
Connect to printer



Connect to camera



Extend distance for digital devices



Extend distance on office desk



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Extension & Expansion: Handled Easily with One Cable

Male Port



Female Port



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High-Power Devices: Supports External Auxiliary Power

micro USB port: used for auxiliary power supply of devices with power consumption greater than 2W



Connect to the TV without the hassle of finding ports

Plug-and-play (no drivers) – smooth, device-safe use. Extend your TV's USB to desktop for easier leisure.



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Product Specifications

Product Name: Fiber Optic USB3.2 Extension Cable

Shell: Zinc Alloy Shell

Bandwidth: 10Gbps

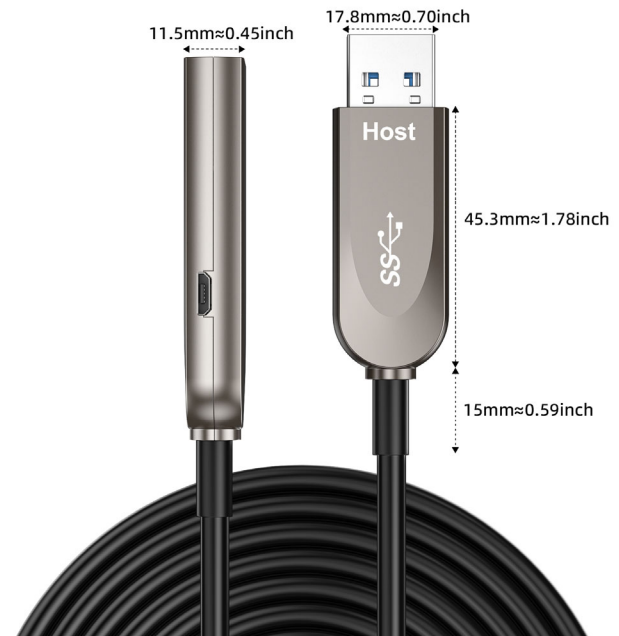
Material: PVC Sheath

Interface: USB3.2 Gen2 (Backward Compatible)

Warranty: 1 Year

Length: 50m

PS: The dimensions marked for the product on this page are measured manually, so slight variations may occur.



YDSAOC 10Gbps Active Fiber Optical USB 3.2 Extension Cable

Model: YDSAOC-10G-USB32-AM-AF | Type: USB 3.2 AOC (Type-A Male to Type-A Female)

★ 1 Key Features

- ✓ **High Bandwidth:** USB 3.2 SuperSpeed up to 10Gbps
- ✓ **Long-Distance:** Lossless signals up to 50 meters
- ✓ **Backward Compatible:** USB 3.2 Gen 2 / 3.1 / 3.0 / 2.0 / 1.1
- ✓ **On-Cable Power:** 5V / 900mA, no external power source
- ✓ **Easy Installation:** Plug-and-play, unidirectional
- ✓ **EMI/RFI Resistance:** Near-zero interference
- ✓ **Customizable:** Length, logo & packaging up to 50m

🏢 2 Intended Applications

- Machine Vision & Camera Link
- Medical Imaging Equipment
- Digital Signage & LED Signboards
- Conference Room & Video Conference Systems
- Home Theater, Projectors & Set-top Boxes
- Radio & TV Broadcast Stations
- Security Monitoring Systems
- Gaming PCs, Hard Drives & Webcams



Ideal for environments requiring extended transmission distances without on-site power, with high reliability in electromagnetically complex settings.

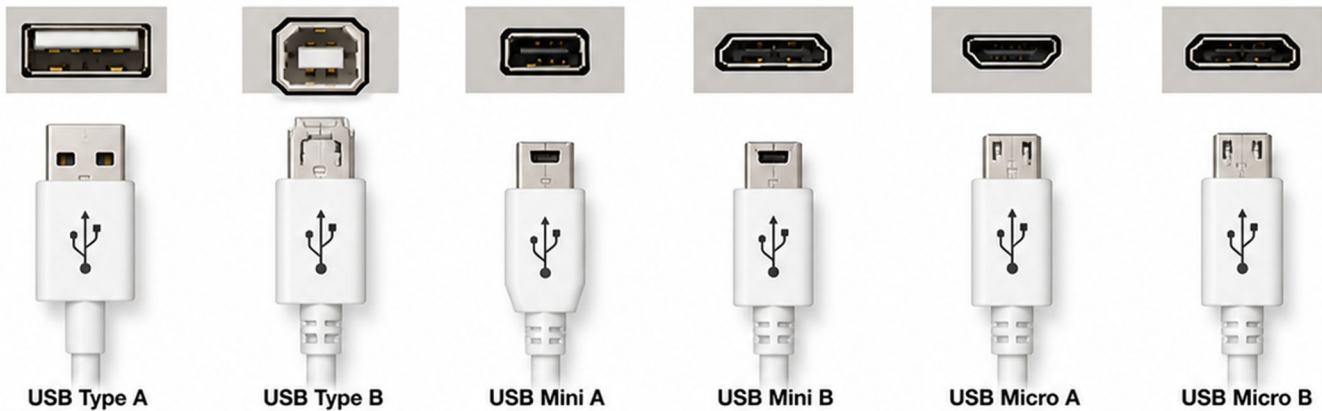
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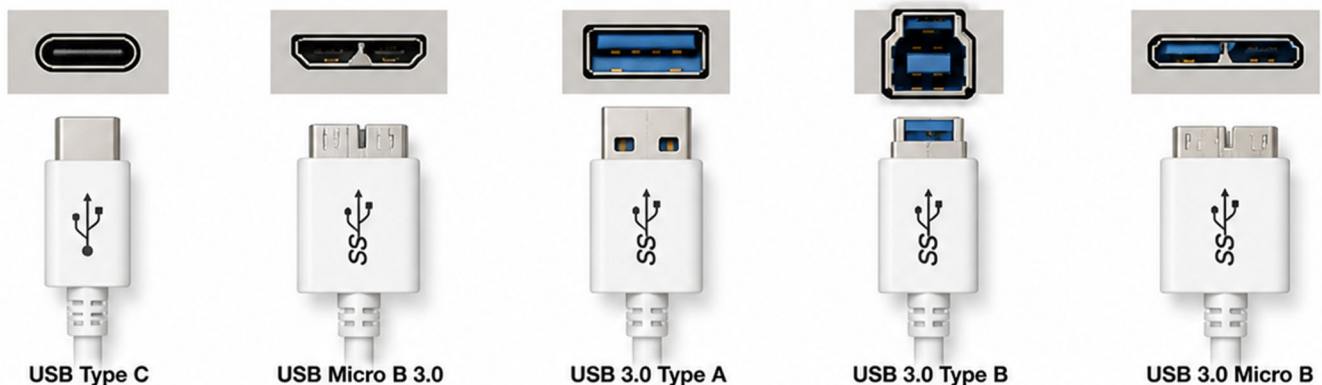
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Row 1 - Legacy/USB 2.0 Connectors



Row 2 - Modern Connectors



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.



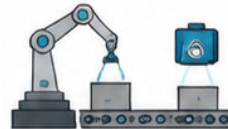
9 USB4 Applications

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