

# iFiber

## AOC-USB31-CCDV-xx

USB C to C Fully Featured Active Optical Cable

Datasheet V2.0





## 1. DESCRIPTION

With no external power needed, its built-in active circuitry is powered by both ends of the cable, eliminating external power supply costs. With power delivery of up to 60 watts, the next-gen AOC supports various voltage profiles up to 20 Volts at 3 Amps and is thus able to charge a wide range of devices. With a strong zinc alloy metal shell, the attractive gold-plated contacts maintain a long-lasting, reliable electrical connection.

The next-gen cable is conveniently backwards compatible with previous USB standards and also works with Thunderbolt devices (With DP Alt Mode) and is available in 3, 5, 7, and 10 meter (33 feet) lengths, with support available for extra customization.

## 2. FEATURES

- Support USB 3.1 Gen2
- Support USB 2.0 high speed and full speed
- Support adaptive 4-Lan DP1.2 + USB 2.0
- Adaptive 2-lane DP 1.4 + USB 3.1 Gen2 10Gpbs
- Plug and play without driver dependent
- High reliability
- Thinner, lighter and softer than conventional copper cable
- Highly resistant to EMI and RFI
- USB 3.2 Gen 2 compliant with SuperSpeed+ transfer rates up to 10 Gbps
- USB-C compliance with DisplayPort 1.4 Alternate Mode (DP Alt Mode) for resolutions up to 8K@60Hz or 4K120Hz on supported devices and displays
- Supports pass-through of EDID and HDCP-encrypted signals.
- Ultra-flexible, ultra-thin 5.2mm diameter cable — a narrow bend radius facilitates easier installation and reduces the possibility of cable damage.
- Bidirectional USB power flow — when connected to USB devices that support USB PD (Power Delivery), power flows both ways, enabling both host and peripheral devices to provide power to the far-end device.
- Supports USB Power Delivery (PD) and Quick Charge™ (QC) up to 60W, 20V3A
- Charges a USB-C powered device such as a notebook, Macbook Pro® or tablet from a USB-C PD wall charger or powerbank
- Highly resistant to EMI/RFI Interference, the USB C full function (Data + Video + PD) can be used in high-interference environments, such as data centers and manufacturing facilities
- USB-C male to USB-C male for connecting a USB-C device to a USB-C port
- Overcomes the USB-C distance limitation for power, data, and video at a range up to 10m without signal loss
- #Available in 3, 5, 7, and 10 meters lengths

### 3. SPECIFICATION

<b>Model</b>	<b>AOC-USB31-CCDV-xx</b>
Name	USB C to C Fully Featured Active Optical Cable
Host/ Source	USB C Male
Device/ Display	USB C Male
DP 1.4 Bandwidth	32.4Gbps
DP 1.4 Resolution	7680X4320@60HZ; 3840X2160@120HZ 4:4:4
USB 3.1 Gen2	10Gbps
Compatibility	USB 3.1, 3.0, 2.0, 1.1
PD power	20V, 3A, 60W
Fiber	OM3 Multimode, 5-cord
Lengths	AOC-USB31-CCDV-03: 3m AOC-USB31-CCDV-05: 5m AOC-USB31-CCDV-07: 7m AOC-USB31-CCDV-10: 10m
Dimension	OD 5.2mm
Working Temperature	-40 to 70 B14°C
Shell	zinc alloy metal
Consumption	Max. 1.25W
Strength	200N
Bending capability	40N, bending 1,000 times tested.
Bending OD	20-40mm
Jack	PVC
Note	This cable doesn't support all Host and Device end with Thunderbolt 3/4. It works with both ends USB protocol or one end with Thunderbolt.

### 4. APPLICATIONS

- Digital Signage
- LED signboards in streets and in stadiums
- Medical Imaging Equipment
- Airplane On-board Video System
- Home Theater
- Blue-ray, 3D video, Projector, Set-up box, DVR, Game Consoles and Computer
- TV Broadcast Station



- Conference Room Video Equipment
- Security systems

## 5. ORDER CODES

Part Number	Description
AOC-USB31-CCDV-03	USB3.1 Gen2 & DP1.4 Hybrid Type-C AOC, Length 3m
AOC-USB31-CCDV-05	USB3.1 Gen2 & DP1.4 Hybrid Type-C AOC, Length 5m
AOC-USB31-CCDV-07	USB3.1 Gen2 & DP1.4 Hybrid Type-C AOC, Length 7m
AOC-USB31-CCDV-10	USB3.1 Gen2 & DP1.4 Hybrid Type-C AOC, Length 10m