

USB-C to USB-C AOC Cable

Active Optical Cable · AV / Data Connections

ACTIVE OPTICAL CABLE

PRODUCT CLAIM

«Mission-critical connectivity, from design to deployment.»

The Percon USB-C to USB-C AOC (Active Optical Cable) is an active optical connectivity solution designed to transmit high-definition video and data over long distances without signal loss. Compatible with DisplayPort 1.4 Standard devices and DP Alternate Mode over USB-C, it integrates fiber optics and copper in a single Type C connector for demanding professional installations.

Its core combines 4 optical fibers for DP signal transmission and 7 tinned copper wires for the signaling protocol, eliminating electromagnetic interference and attenuation even over long distances.

Key Benefits

- Active optical transmission, no attenuation
- Compatible with DisplayPort 1.4 and DP Alternate Mode over USB-C
- Resolution up to 4K×2K@60Hz / 4K@30Hz
- Plug & Play — no external power, no drivers
- Anti-EMI zinc alloy housing, high durability



Highlighted Specifications

21.6 Gbps

BANDWIDTH

HDCP 2.2

CONTENT
PROTECTION

4K×2K

@ 60 HZ

USB-C

STANDARD

HDR / 3D

COMPATIBILITY

Specifications & Features

USB-C to USB-C AOC Cable · Specifications & Features

Technical Specifications

Parameter	Value
Resolution	4K×2K@60Hz, 4K@30Hz, 1080p, 1080i, 720p
Bandwidth	21.6 Gbps (5.4 Gbps per channel)
Chip	Imported photoelectric conversion chip
Color space	4:4:4 Max
Color depth	12 bit Max
Type	Male – Male
Core	4 optical fibers + 7 tinned copper wires
Outer diameter	5.2 mm
Housing	Zinc alloy
Jacket	PVC, RoHS compliant
Power	No external power — Plug & Play
Compatibility	HDCP 2.2 / HDR / EDID / DDC / 3D
Power consumption	350 mW
Voltage / Current	5V / 100mA
Operating temp.	-20°C ~ 70°C

Features

1. Compatible with all DisplayPort 1.4 Standard devices.
2. Compatible with DP Alternate Mode over USB-C Standard.
3. Four optical fibers carry the DP signal; seven tinned copper wires carry the signaling protocol. No electromagnetic interference, no attenuation.
4. Long transmission distance — up to 100 meters.
5. Photoelectric conversion chip for improved compatibility, stability and service life.
6. Plug & Play — no external power, no drivers.
7. Anti-EMI zinc alloy housing: greater resistance and durability.

Compatibility



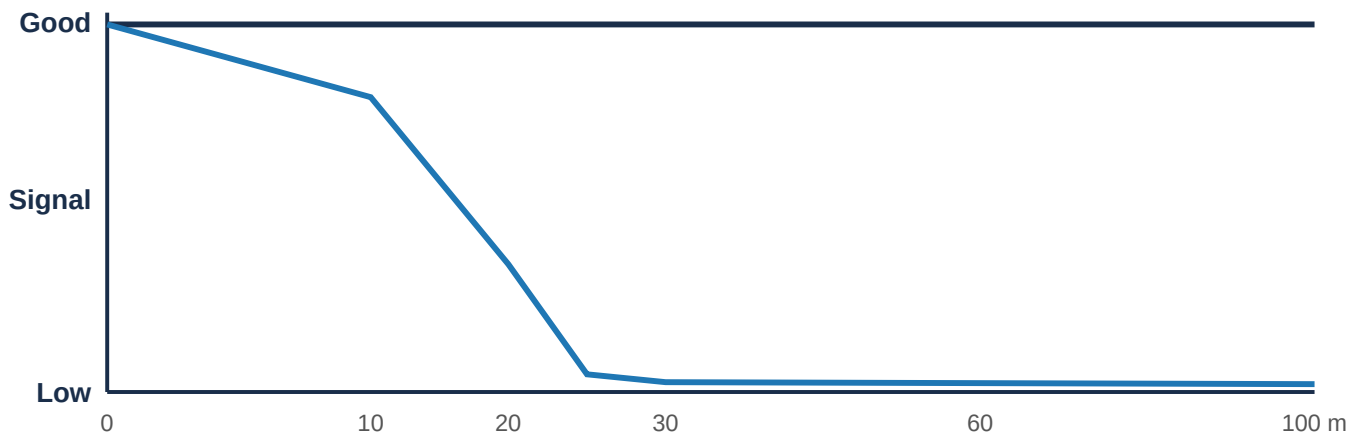
Type C Male–Male connector, zinc alloy housing

Signal Quality & Applications

USB-C to USB-C AOC Cable · Signal Quality & Applications

Signal Quality

Full 4K×2K@60Hz / 4K@30Hz · 21.6 Gbps



● Percon AOC — active optical

Up to 100 m with no attenuation, immune to electromagnetic interference (anti-EMI).

● Standard DP copper cable

Up to 10 m before noticeable attenuation; susceptible to EMI interference.

Applications

Large-screen displays / multimedia

Large-format flat-panel TVs

Medical imaging displays

Large-format outdoor advertising

Public security cameras

Long-distance HD videoconferencing

Digital signage · Home theater

HD digital billboards

School & family security

Aircraft imaging systems

Multi-screen projection & splitting



✓ Compliant with DisplayPort 1.4 specifications.

Custom Services & Packaging

USB-C to USB-C AOC Cable · Custom Services & Packaging Information

Custom Services

Length	10 ~ 100 meters
Housing color (zinc alloy)	Black / Silver / Others
Inner jacket color	Black / Blue
Outer jacket	PVC / Braided / Steel / CL3
Connector	Type C
Type	Male - Male

Packaging Information

Length (m)	Weight (kg)	Packaging	Dimensions (cm)	Box weight (kg)
10 m	0.34	Velcro + OPP bag	39×33×26	10.7
20 m	0.59	Velcro + OPP bag	39×33×26	12.5
30 m	0.80	Reel + box	46×22×41	11.9
40 m	1.06	Reel + box	46×22×41	14.5
50 m	1.32	Reel + box	46×22×41	17.0
60 m	1.57	Reel + box	45×22×30.5	8.4
70 m	1.83	Reel + box	45×22×30.5	9.8
100 m	2.59	Reel + box	45×22×30.5	13.5

SERVICE CLAIM

«Advanced technology. Close support. No excuses.»