TC-AOC-USBC

Full-featured Type-C Active Optical Cable

Full-featured USB-C: video, data and power in one cable

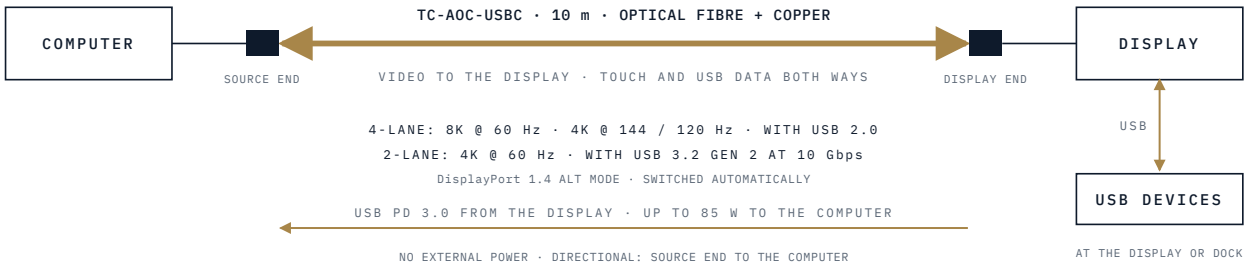
8K60	10 Gbps	85 W	10 m
in 4-lane mode · 4K @ 144 / 120 Hz too	USB 3.2 Gen 2 in 2-lane mode · USB 2.0 in 4-lane	USB PD 3.0 charging, at 10 m	no external power · directional

TC-AOC-USBC is a full-featured USB-C active optical cable, 10 m long: the high-speed signals travel on optical fibre, the low-speed signals and power on tinned copper. It carries DisplayPort 1.4 Alt Mode video and switches between two modes by itself — four lanes for 8K @ 60 Hz or 4K @ 144 / 120 Hz, with USB 2.0 alongside, or two lanes for 4K @ 60 Hz, with USB 3.2 Gen 2 at 10 Gbps.

Power from a USB Power Delivery 3.0 display or dock reaches the computer over the same cable, at up to 85 W on the 10 m length (PD 3.0, 20 V / 5 A profile), and touch from a touch display works back to the source. The cable needs no external power (working voltage 5 V ± 0.25 V), and an E-Mark chip keeps the current stable. It is directional: the Source end goes to the computer and the Display end to the screen. Pull it with no more than 10 kg of tension, and hold the connector body, never the cable, when plugging or unplugging.

01 KEY CAPABILITIES

- E-Mark chip for stable current
- Touch feedback — a touch display works in conjunction with the source



SIGNAL PATH · VIDEO, USB AND CHARGING ON ONE CABLE, THE SOURCE END AT THE COMPUTER

02 VIDEO

Signal standard	DisplayPort 1.4 Alt Mode — 4-lane or 2-lane, switched automatically
Maximum resolution	4-lane mode: 8K @ 60 Hz, 4K @ 144 / 120 Hz · 2-lane mode: 4K @ 60 Hz

03 CONNECTIVITY

USB	USB 3.2 Gen 2 (10 Gbps) in 2-lane mode · USB 2.0 in 4-lane mode · backward compatible with USB 2.0 / 1.1
Connectors	USB-C male to USB-C male · directional — Source end to the computer, Display end to the screen

04 ELECTRICAL & PHYSICAL

Power supply	No external power · working voltage 5 V ± 0.25 V
Operating temperature	0 to 40 °C
Storage temperature	−20 to 60 °C
Humidity	Operating 20–80 % · storage 10–90 % RH, non-condensing
ESD protection	±8 kV air · ±4 kV contact (IEC 61000-4-2)
Cable construction	Optical fibre + tinned-copper hybrid · 850 nm · 6.5 mm OD · PVC jacket · metal connector shells, nickel-plated
Charging / power delivery	USB PD 3.0, 20 V / 5 A — up to 85 W at 10 m, from the display or dock, passed through by the cable
Installation limits	Pull no more than 10 kg · hold the connector body, never the cable

05 COMPLIANCE & ASSURANCE

Certification statement	Designed for global compliance — CE, FCC, RoHS, and regional certifications, as applicable.
Warranty	3 years

06 ORDERING

Order code	**TC-AOC-USBC-10**
Lengths / order variants	10 m

PRODUCT PAGE

telecis.com/products/cables/tc-aoc-usbc/

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signal · engineered.