



# Active Optical Cable USB Type C

NEW

Extend your USB Type C over long distances

## Description

In standard version, the USB Type C protocol supports all performance levels over a maximum distance of 1 meter. Our USB Type C Active Optical Cable (AOC) is therefore the solution for extending this protocol. With its hybrid design, power is supplied via copper wires, while data is transmitted via optical fibers to avoid any additional power source and can be used like a standard plug-and-play cable. With our USB Type C AOC cable, you can extend this protocol up to 15 meters without any loss of performance or latency.

## Main features

### Main characteristics:

- 15 meters maximum with guaranteed performances.
- Thread coupling, MIL-DTL-38999 series III type shell size 11
- Shock, vibration, and traction resistance
- EMI protection: Shielding continuity
- Mating plug/receptable cycles: 500
- Cable jacket material : TPE Low Smoke Zero Halogen

### Data transmission and Power:

- Support 10GB/s data transmission USB3.2 Gen 2
- Support 8K at 60Hz ; 4K at 120Hz video transmission
- Support 4 Lane DP2.1 + USB2.0 and 2 Lane DP1.4 + USB3.2
- Support USB2.0 and USB1.1 signal
- Support Power Delivery (see below important note) ⚠

### Environmental protection:

- Sealing : IP68 in mated condition
- Material and platings resistance to salt spray:
  - 48 h - Aluminum shell with Nickel plating ✓
  - 500 h - Aluminum shell with Black zinc nickel plating ✓
  - 500 h - Aluminum shell with Olive drab cadmium plating ✓
  - 500 h - Aluminum shell with Tin-zinc plating ✓ NEW
  - 500 h - Marine bronze shell ✓
  - 500 h - Stainless steel passivated ✓
- Shock resistance: IK06 onto mated pair
- Operating temperature: -20°C to +80°C (-4°F to 176°F)

✓: RoHS compliant

## Power Delivery on AOC USB C

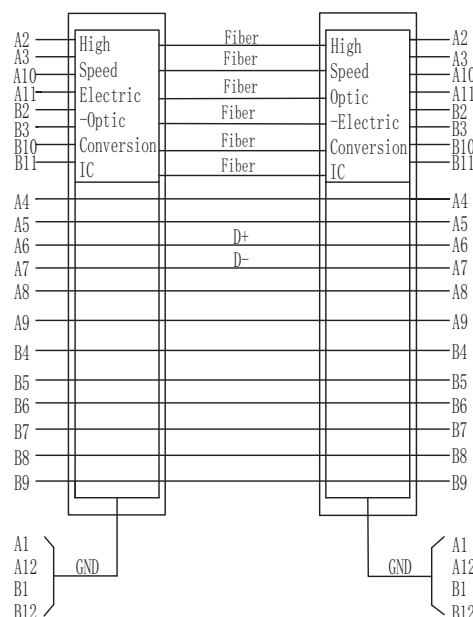


5m : 60 W  
10m : 60 W  
15m : 40 W

### Important Note :

We have designed and tested several configurations and certify that our solution is compliant with the AOC Type C standard. However, it appears that some systems are not compatible with this new AOC technology. We therefore recommend that you test your system with one of our products available from our distributors. Please check the How to Order, the red dot are our products available from our distributors.

## AOC USB C wiring diagram



## Markets & Applications



C6ISR, Battlefield  
Communication



Ground Vehicles  
Soldier worn application



Naval



### Applications :

- Displays, Consoles, Visions systems, Situation awareness

# AOC USB Type C

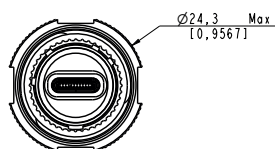
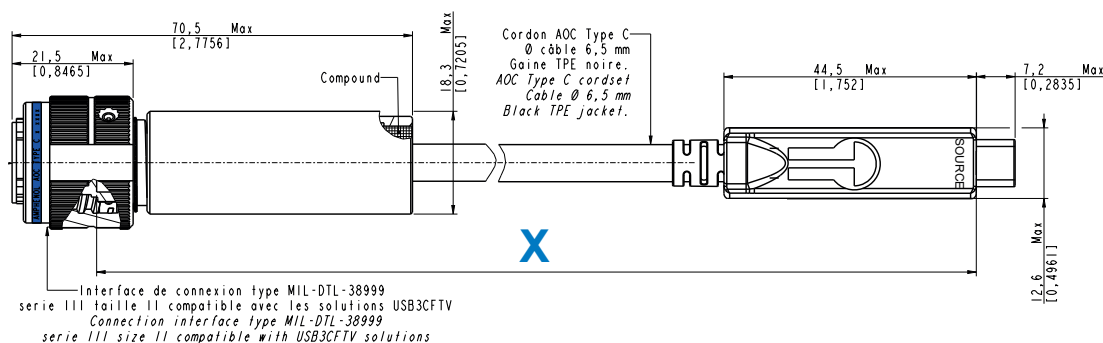
## Available configurations

Plug with cordset – Shell type 6



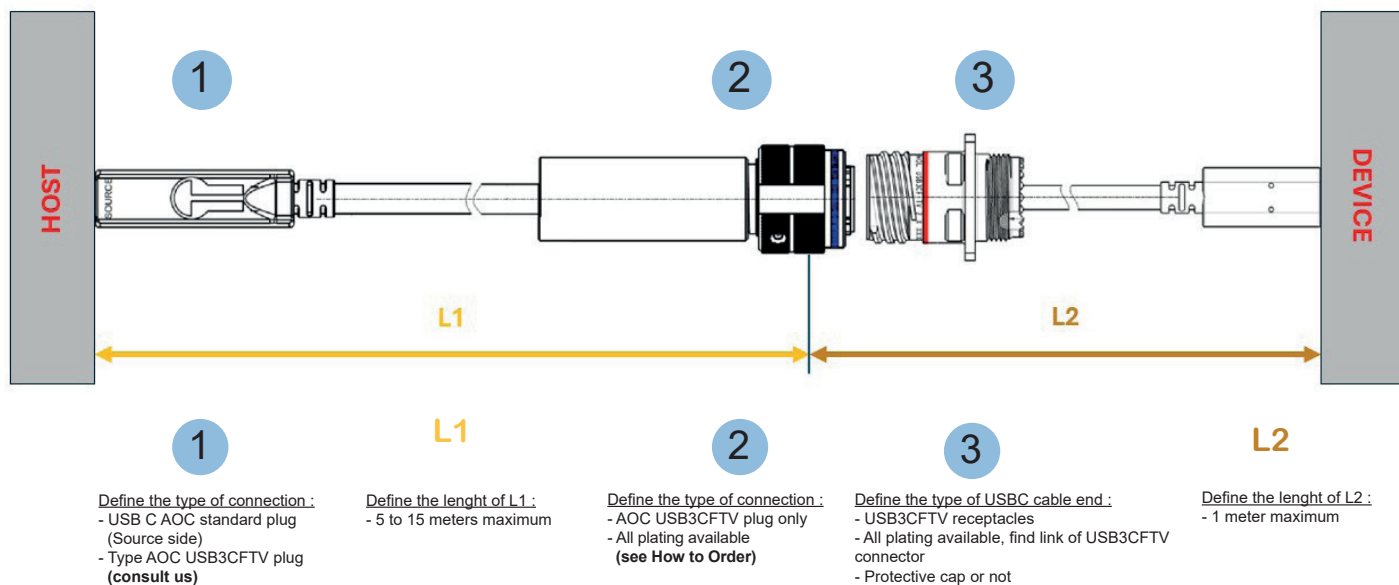
Part number type: **AOC USB3CF TV 6 x xxx**

**X:** see the How to order to complete your part number

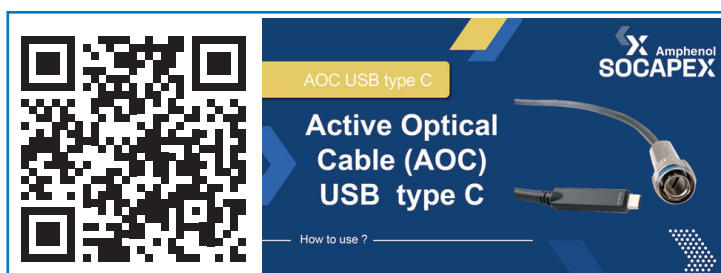


## AOC USB C selection guide

Define your own solution by selecting options in the scheme below



## Available How to Use video



# AOC USB Type C

## How to order - Connector

1.	2.	3.	4.
Series	Shell type	Material and plating	Cordset length
AOC USB3CF TV	6	G	100

### 1. Series

AOC USB3CF TV Active Optical Cable USB type C Field

### 2. Shell type

6 Plug only

### 3. Material and plating

	Shell material	Shell finish
• G	Aluminum	Olive drab cadmium
• N		Nickel ✓
• ZN		Black zinc nickel ✓
TZ		Tin Zinc ✓ <span>NEW</span>
BZ	Bronze ✓	
S	Inox	

✓ : RoHS compliant

### 4. Cordset length

	Meters	Inch
• 050	5 m	196,85
• 100	10 m	393,70
• 150	15 m	590,55

• Standard configurations available from stock in our distributors network.

Other configuration please consult us.

Discover a selection of products compatible with your AOC USB type C :



## USB3CFTV

- Shell size 11
- USB 3.2 Gen2
- Power delivery
- Video
- Flip ability