# DP 1.4 Type C AOC Manual



## Description

ELII DP 1.4 AOC is our new Audio/Video cable , HD signal transmission depending on optical fiber,  not only its support length become much longer (above 100m) ,but also signal quality is much more stable , no EMI completely, especially can support 8.1Gbps bandwidth per channel . Support 8K, meets DP1.4 Standard,  It is a mature & competitive solution in the high speed date transmission market . This optical fiber cable can be applicated to computer with USB type C interface , Displays outdoor , LED signboards in streets / stadiums and Security System , that transfer audio video signal .

## Key Features

1. Support 8K@60Hz , Supports HBR3, HDCP 1.4 / 2.2; very good compatibility;

2. Support DP1.4 standard, bandwidth can reach 8.1 Gbps per chanel;

3. Support length up to 100m max , length custom is available ;

4. Hybrid fiber and copper,   much more slim and light ;

5. OD 4.8 mm, very flexible;

6. Low RFI / EMI profile for sensitive applications

## Specifications

### 1. Performance

| | |
|---|---|
| Standards Compliance | DisplayPort 1.4 / HBR3, HDCP 1.4 / 2.2 |
| Maximum Pixel Clock Frequency | 810 MHz |
| Maximum Video Bit Rate | Supports up to 8.1 Gbps per lane, 32.4 Gbps Total |
| Maximum Color Depth | 48bits |
| Maximum Supported Resolutions | 8K@ 60Hz |

### 2. Connections

| | |
|---|---|
| DisplayPort Input / Output | 20-pin DisplayPort |
| Power | No external power supply is required. |

### 3. AUX Channel Support

| | |
|---|---|
| AUX Channel Communications | Supports bidirectional communications for EDID, HDCP, Link Training, etc. |
| HDCP Support | HDCP 1.4 and HDCP 2.2 |

## 4. Optical

| | |
|---|---|
| Optical Technology | 4x Discrete Optical Channels, 10 GHz, 850 nm |
| Optical Transmitter | Tx Module:4x 850 nm Multi-mode VCSELs |
| Optical Receiver | Rx Module:4x GaAs PIN Photo Diodes |

## 5. Cable

| | |
|---|---|
| Fiber Cable Type | Hybrid cable 4x fiber and 8x copper wire |
| Cable Jacket | PVC, Black |
| Maximum Cable Length | 100 meters |

## 6. Mechanical - Cable

| | |
|---|---|
| Product Weight | Varies with length |
| Maximum Tensile Load | 300N |
| Minimum Bend Radius | 48mm |
| Cable Outside Diameter (W x H) | 4.8mm |

## 7. Environmental

| | |
|---|---|
| Operating Temperature | 0℃ to + 50℃ |
| Storage Temperature | -20℃ to + 85℃ |
| Operating / Storage Humidity | 5% to 85% (non-condensing) |

## 8. Power Requirements

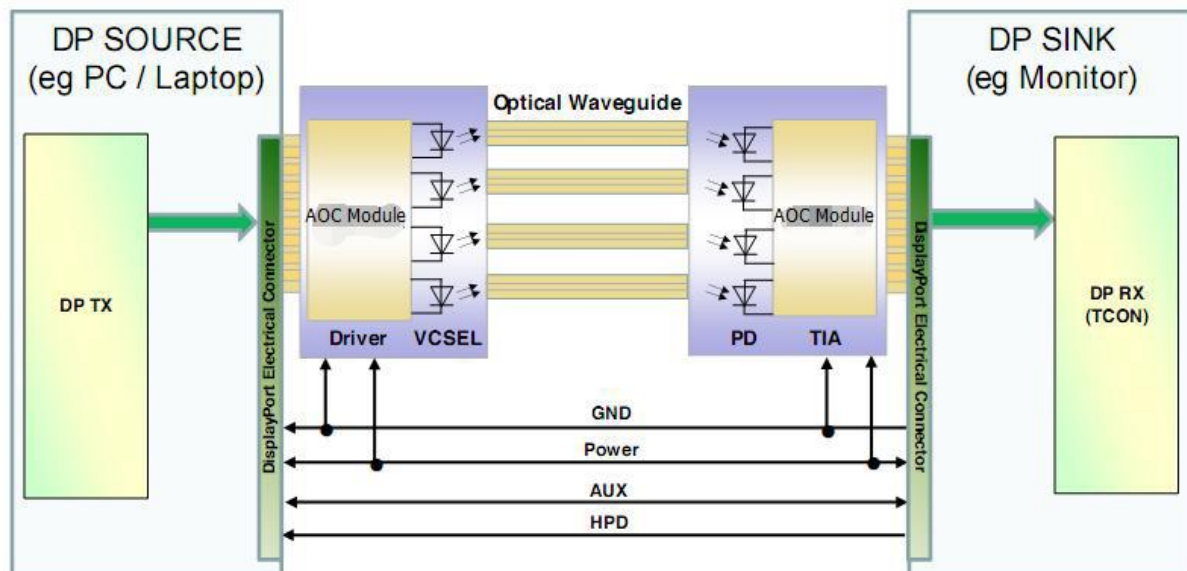| | |
|---|---|
| Power Source | Powered from DisplayPort source device |
| Power Consumption | < 0.5 watt each end |

## Structure
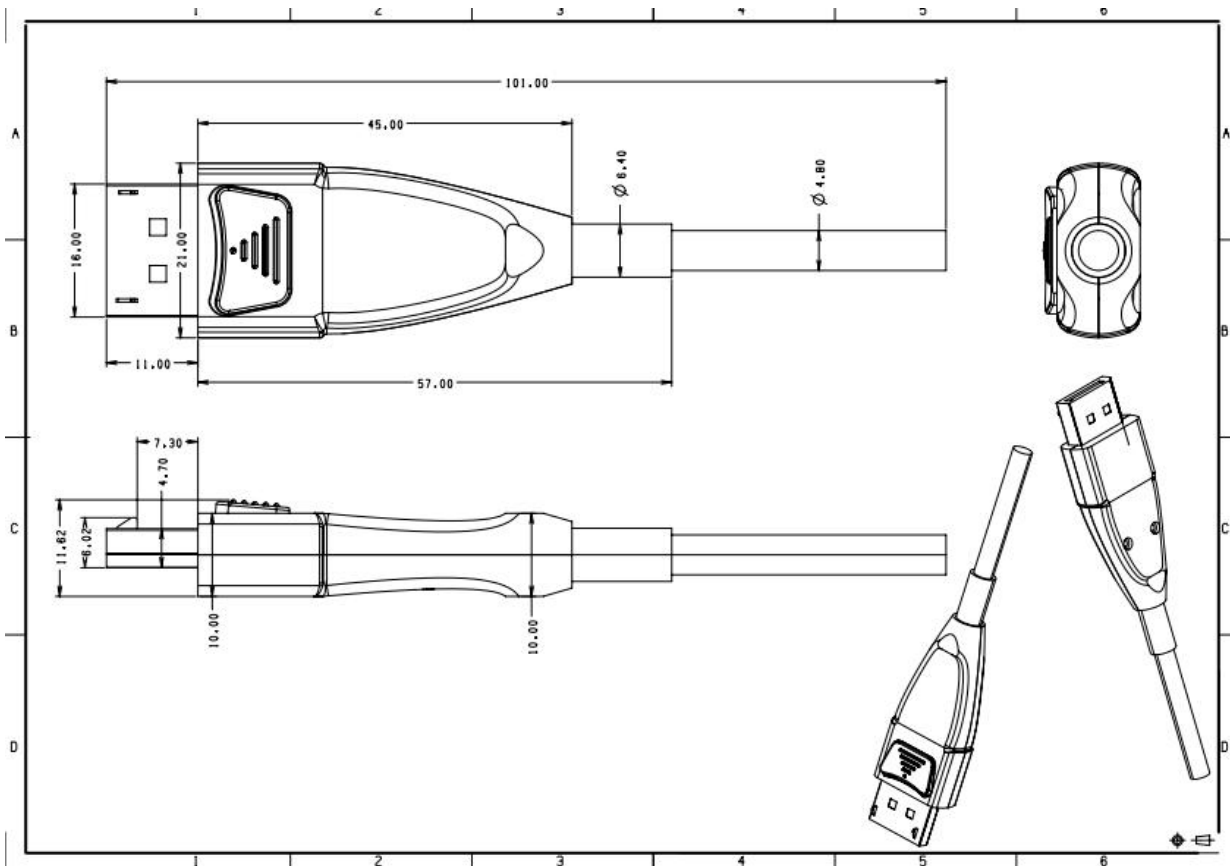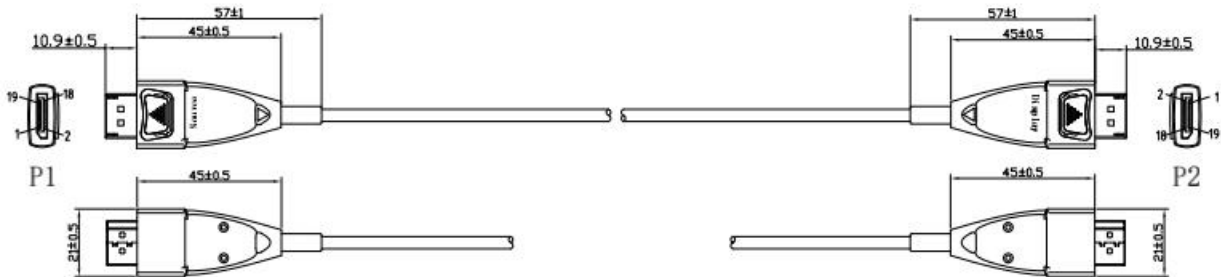
DP 1.4 AOC Drawing

## Applications

1. Digital Signage , Security systems ,Home Theater ;

2. Conference Room Video Equipment;

3. LED signboards in streets and in stadiums ; TV Broadcast Station;

4. Medical Imaging Equipment ,Airplane On-board Video System;

5. Blue-ray, 3D video, Projector, Set-up box, DVR, Game Consoles and Computer .