Premium Optic DisplayPort 1.4 Cables



Descriptions

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. Plug and play, No external power required. 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 channel ;
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
7. Plug and play.

Applications

1. Medical Imaging Equipment;
2. Airplane On-board Video System;
3. Car Service Center big screen show Video System;
4. TV Broadcast Station;
5. Conference room Video System;

6. Blue-ray, 3D video, Projector, Set-up box, DVR, Game Consoles and Computer;
7. Digital Home Theatre;
8. LED signboards and panel information displays for Airports, Stadiums and Outdoor;
9. Advertising, Auditorium, and Kiosk;
10. Traffic control;
11. Factory Automation Systems.

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

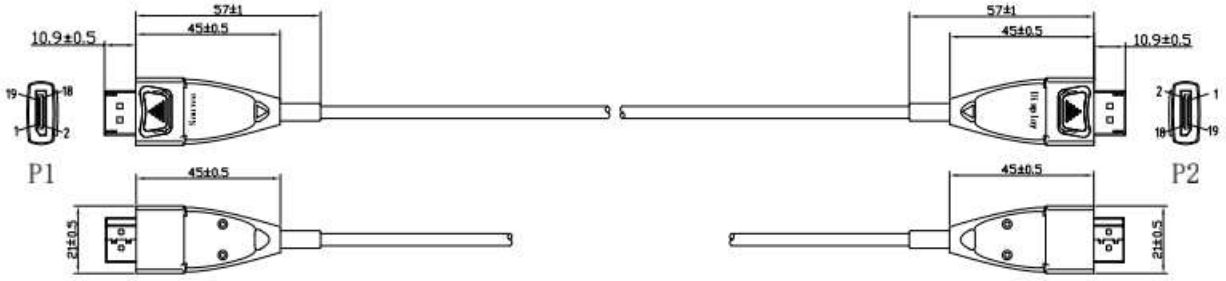
7. Environmental

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

8. Power Requirements

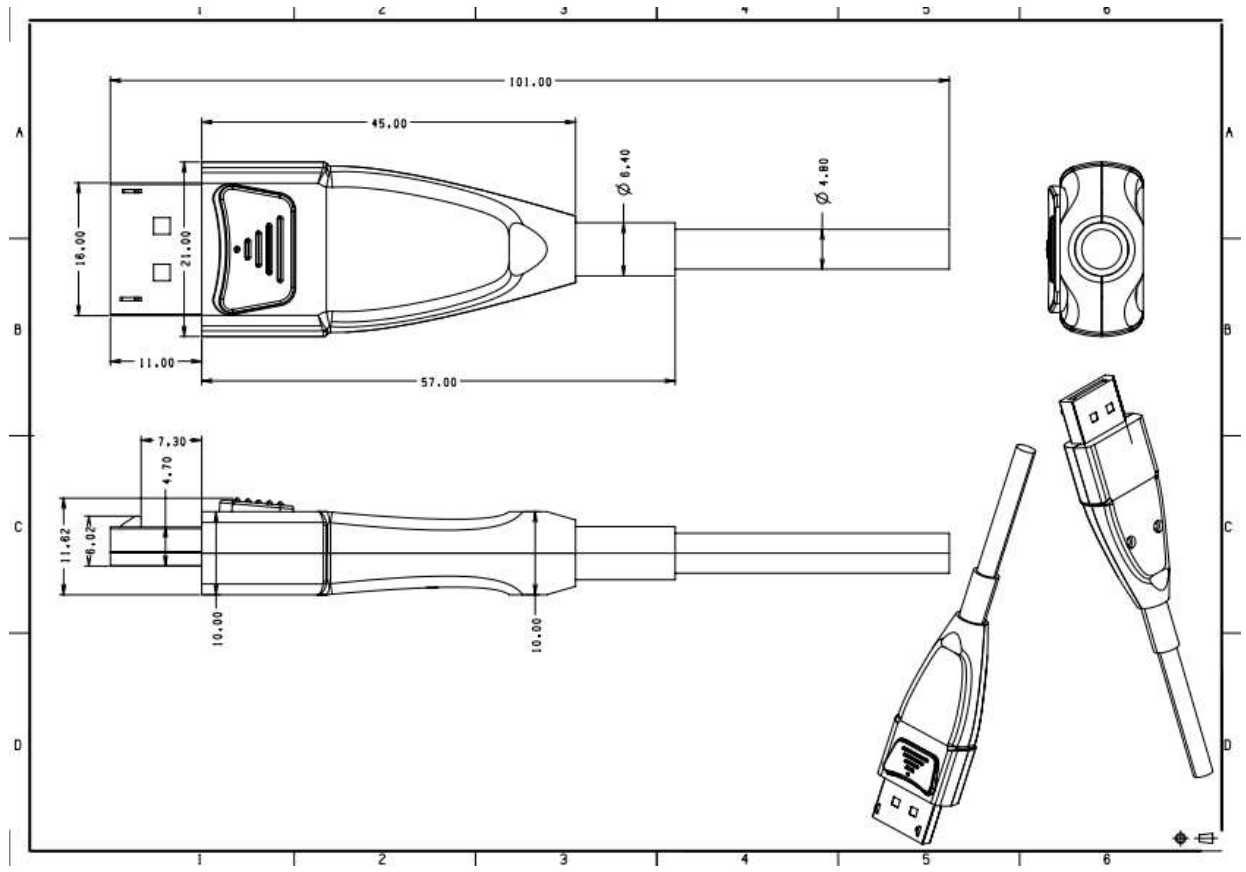
Power Source	Powered from DisplayPort source device
Power Consumption	< 0.5 watt each end

DP Type A Pin Assignment



PIN	Function	PIN	Function
1	ML_Lane 0 (P)	11	GND
2	GND	12	ML_Lane 3 (n)
3	ML_Lane 0 (n)	13	GND
4	ML_Lane 1 (p)	14	GND
5	GND	15	AUX_CH (p)
6	ML_Lane 1 (n)	16	GND
7	ML_Lane 2 (p)	17	AUX_CH (n)
8	GND	18	Hot Plug Detect
9	ML_Lane 2 (n)	19	DP Power Return
10	ML_Lane 3 (p)	20	DP Power

Structure



DP 1.4 AOC Drawings

Installation

