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Active Optical DisplayPort Cable

The Covid Active Optical Cable is the perfect solution for critical AV installations that demand flawless signal integrity. The latest advances in technology allow the Active Optical Cable to be compliant with 3D, 4K UHD resolutions, as well as features like DPCD, EDID and HDCP operations.

The Active Optical Cable has features unlike any other which make it the best choice when flexibility is the key. The Active Optical Cable is thinner, lighter and more flexible than copper.

The Active Optical Cable is offered at lengths up to 100m (328ft.), which is far beyond the normal reach of conventional copper DisplayPort cables. Covid is proud to offer cable jackets that comply with the UL standards and have a Plenum (CMP) Rating, (Low Smoke Zero Halogen, LSZH) Also available by special order).

Note: These cables are recommended for point-to-point application use only. Not to be used with wall plates, additional patch cables or coupling devices.

Features

- Plenum Rated
- Supports Resolutions up to 4K/60Hz
- Supports up to 21.6Gbps data rate
- Extends DisplayPort stream up to (328 feet)
- Supports up to 8 channels of 16 or 24bits linear PCM & 32 to 192KHz sampling rate
- Bi-directional hardware handshake with voltage assertion for HDCP, EDID and DPCP
- Plug & Play
- High Pulling Strength & Compression Load

Applications

- Professional AV systems interconnection
- In & outdoor digital signage panels & kiosks
- Home theater systems
- Facility automation systems

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Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max	Unit
Supply Voltage	VCC	-0.3		3.3	V
Storage Temperature	Tstg	-30		70	°C
Relative Humidity	RH	5		85	%
Conducted Emission & Radiated Emission		B			Class

Recommended Characteristics

Parameter	Symbol	Min.	Typ.	Max	Unit
Supply Voltage ¹	VCC	3	3.3	3.6	V
Operating Temperature	T _{OP}	0		50	°C

¹ All power supplied from source PWR 20pin..

Electric Characteristics

Parameter	Symbol	Min.	Typ.	Max	Unit
Operating Current	I _{OP}	33			mA
Power Consumption	P _O	0.11			W
Differential Input Voltage	V _{ID}	200		1400	mV
Differential Output Voltage	V _{OD}	180		330	mV
Lane Data Bit Rate		250		5400	Mbps

Physical Characteristics

Parameter	Value	Unit
Cable Dimensions (WXH)	3.4mm (±0.2mm)	mm
Cable Color	Gray	-
Optical Fiber	Multi-mode fiber	um
Copper Wire	28 AWG	-
Cable Jacket Material	CMP-OF (UL) & LSZH	-
Connector Pull Strength	10	Kg
Compression Load Resistance	50	Kg
Minimum Bending Radius	6	mm
Case Material	ABS (Acrylonitrile-Butadiene-Styrene)	-

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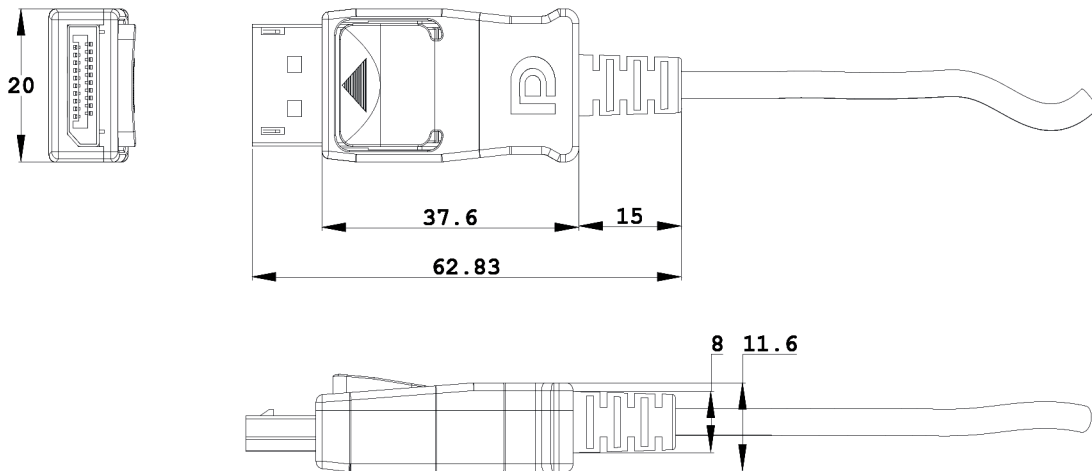
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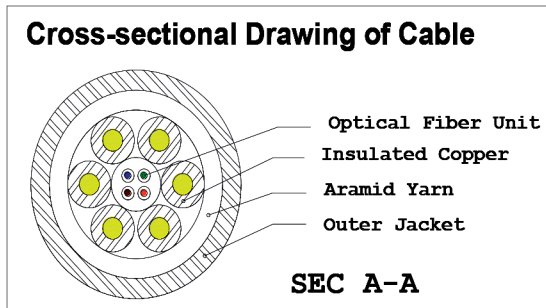
Product Dimensions

Unit of Measure (mm)

- DisplayPort Connector



- Hybrid Cable



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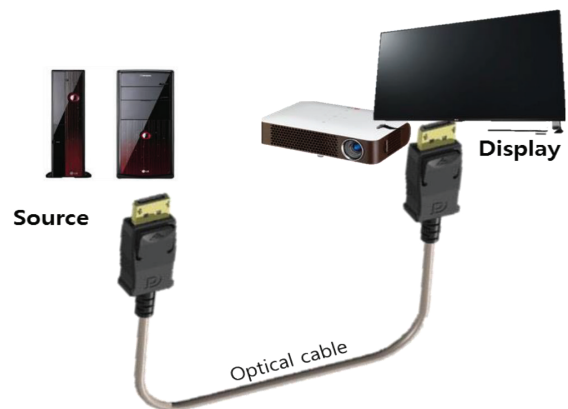
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Pin Description

Pin	Symbol	
1	Lane0+	Link 0 lane positive
2	GND	Ground
3	Lane0-	Link 0 lane negative
4	Lane1+	Link 1 lane positive
5	GND	Ground
6	Lane1-	Link 1 lane negative
7	Lane2+	Link 2 lane positive
8	GND	Ground
9	Lane2-	Link 2 lane negative
10	Lane3+	Link 3 lane positive
11	GND	Ground
12	Lane3-	Link 3 Lane negative
13	CFG1	Config1(Ground)
14	CFG2	Config2(Ground)
15	AUX+	Aux channel positive
16	GND	Ground
17	AUX-	Aux channel negative
18	HP	Hot Plug
19	RTN	Return
20	PWR	DC +3.3V*

Product Installation Diagram



1. Plug in Tx connector labeled "SOURCE" to DisplayPort on source device.
2. Plug in Rx connector labeled "DISPLAY" to DisplayPort of display device like a monitor.
3. Take the same steps when connecting other source and display devices.

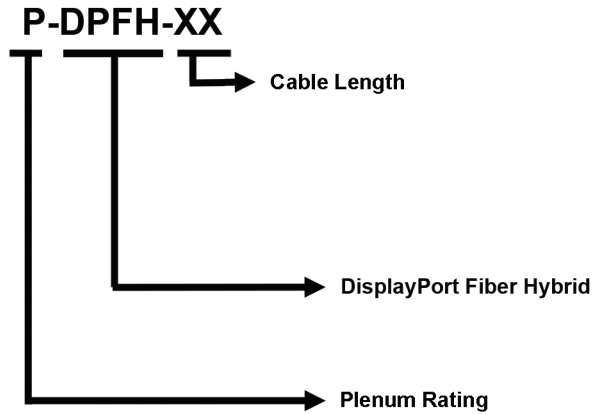
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TECHNICAL SPECIFICATION



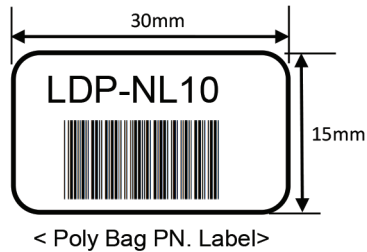
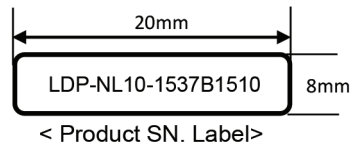
Ordering Information



Cable Length Index

Length	Code
32ft.	32
49ft.	49
75ft.	75
98ft.	98
164ft.	164
196ft.	196
262ft.	262
328ft.	328

Product Labeling



Safety Labels



Caution Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

-Please do not disassemble, Modify the product or cut off the cable

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