

DisplayPort Pure Fiber Extender

Vitex Part Number: LDP-303-TR

LDP-303-TR is Vitex's Pure Fiber DisplayPort Extender, empowering high-performance video system designers to extend their high-performance video further, delivering crystal clear audio and deep color video. This detachable video extender from Vitex allows a DisplayPort 1.4 signal to travel over a pure fiber cable, providing minimal interference and high-speed DisplayPort transmission, up to 1000 feet (300 meters).

Features

- DisplayPort 1.4 over pure fiber up to 1000ft
- Over 30Gb/s data rate enables clear 8K @60Hz video signal transport
- "Click & Connect" fiber connectors. No splicing or fiber terminations required
- Minimizes EMI/RFI risk using fiber optics
- Plenum rated fiber jacket
- MPO cables available separately
- TAA-compliant version available

Applications

- Remote USB Device Connection
- High Speed USB Cameras
- Video Games, Entertainment Systems
- Control Rooms
- Video Conference Systems
- Medical Imaging, Display Connections
- Flight Simulation and Defense Applications



Product Overview

Engineered utilizing pure fiber optical cable, Vitex's Pure Fiber DisplayPort Extender offers a fiber connection for stunning picture clarity, detail, and color depth up to 1000 feet (300 meters). The kit consists of two 6' connector dongles with a DisplayPort transmitting (TX) connector for source (PC, or GPU) and a DisplayPort receiving (RX) connector for display (monitor, or projector). Connection between the TX and RX connector dongles is made with a plenum rated fiber optic MPO cable.

Designed for Pro AV applications, the connector cables support 3V DC power at its source and display for clean and reliable power connection and comes with voltage surge protection.



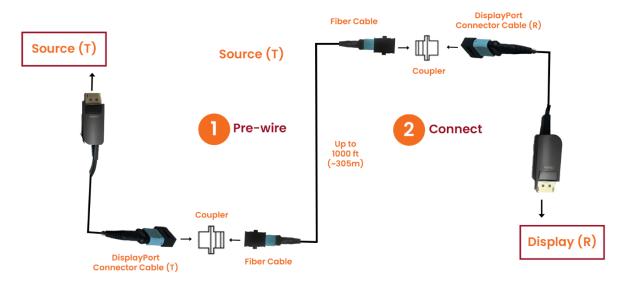


Specifications

Parameter	Specification	
DisplayPort Version	DisplayPort 1.4	
Data Rate	32.4 Gbps	
Resolution	8Kx4K with use of 4:2:0 or	
	VESA Display Stream Compression	
	5K without compression	
	4K@60Hz 24-bit without compression	
Supported Features	Multi-Stream Transport (up to 4 displays on supported systems)	
	HDR HDCP 1.4/2.2./2.3	
	BT.2020	
Power	TX: 0.66W / RX: 0.66W	
Temperature / Humidity	−4°F ~ 158°F (−20°C ~ 70°C)	
	0% - 90% RH	
Altitude (Operating / Storage)	Max 3000m / 5574m	
Package Drop Height	Max 1m	
Package Stack Limit	Max 10 Vertical	
Cable Jacket	Plenum rated	
Fiber Optic Cable Pull Strength	60 pounds	
Bend Radius	0.20″ / 5mm	
DisplayPort Connector Dimension	0.4" x 0.8" x 2.6" / 10 x 21 x 67.4 mm	
Fiber Optic Connector Dimension	0.3" x 0.5" x 1.8" / 8.2 x 12.9 x 1.8 mm	



Connection Diagram



Ordering Information

Part Number	Description	
LDP-303-TR	Pure Fiber DisplayPort Extender, Transmitter and Receiver	
FO-CABLE-yyyPA yyy : denotes length - available in 35ft, 50ft, 100ft, 160ft, 200ft, 1000ft	Vitex Pure Fiber Optic MPO Cable	



Cable Information

Vitex's **FO-CABLE** pure Fiber Optic MPO Cables are ideal for interconnection between the Pure Fiber DisplayPort Extender transmitter and receiver.

Part Number	Length (in Feet)	Meters
FO-CABLE-035PA	35ft	10m
FO-CABLE-050PA	50ft	15m
FO-CABLE-100PA	100ft	30m
FO-CABLE-160PA	160ft	48m
FO-CABLE-200PA	200ft	60m
FO-CABLE-500PA	500ft	150m

Revision History

Date	Description
February 11, 2024	Version 1.0
May 28, 2024	Version 1.1



About Vitex

As a US-based fiber optic connectivity solutions partner, Vitex is relied on by network builders, operators, and OEMs to help make their ideas come to life. Vitex has developed active and passive optics for more than 20 years to help networks reach farther, go faster, and perform better. Regarded for their ability to optimize their broad portfolio of transceivers, cables, and WDMs, companies turn to Vitex when out-of-box thinking, active listening, and relentless solution-seeking are needed.

Vitex's global network of suppliers, partners, and skilled engineering staff make what if and how possible.

We aim to be the fiber optic expert extension of your product development, engineering and procurement departments.

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