# **Oceleritytechnologies**



# Universal Fiber Optic DisplayPort



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# **Celerity Technology Making Fiber Easy for Beautiful Video**

Celerity Universal Fiber Optic (UFO) supports DisplayPort 1.4 connections up to 1000 feet and offers the very best possible picture quality. Celerity Fiber Optic shows full brightness highlights, and the wide range of colors as originally intended by the video engineers during mastering.

A slim, yet durable plenum rated 3mm x 2mm cable jacket encases the fiber optic conductors and dual-layer internal

strengthening materials. Celerity Fiber Optic cables offer isolation from EMI and are plenum rated and for reference level video application projects.





# Two Steps, No Tools

Celerity UFO is installed with a simple two-step process; "Pre-Wire and Connect." This is made possible by Celerity's innovation with fiber optics so that fiber terminations, testing and tools are no longer necessary. This ensures reliability and efficient project deployment.



# **Bi-Directional Cable**

Celerity UFO Cable may be installed from any location between a source and display without the burden of ensuring the cable is in the correct direction. Celerity UFO is designed that each end of the UFO fiber cable acts as a precision optical pathway. Once the Celerity UFO Cable has been installed the UFO cable is ready for source and display connections.



# Fiber Optic Connector Cables

A DisplayPort transmitting (TX) connector cable and an HDMI receiving (RX) connector cable are coupled to the ends of the Celerity UFO Cable and connected to the components. Each Celerity Connector Cable has a 6' Celerity fiber optic for easy access to component connections. The connector cables support 3VDC power at source and display for clean and reliable power connection.

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## **UFO Couplers**

Celerity UFO Connector Cables include a pair of locking couplers that have been designed to ensure correct optical alignment between the UFO cable and the UFO TX and RX connector cables. The UFO coupler adds further protection for the precision optical connection between the fiber cable and the connector cable.



### **UFO Protective Caps**

Celerity UFO Cables and Connector Cables are terminated with a precision optical lens that must be kept free from dust and debris. Each of these optical lenses are protected by a rubber cap that remains in place until the UFO cables are joined. The UFO coupler then provides protection for the life of the cable connection.



# **Keystone Wall Plate**

Celerity UFO may be adapted to a keystone wall plate connection for applications where a flush-mount architectural connection is required. A single-gang wall plate with a UFO Keystone coupler is available separately and may be installed at one or both fiber cable ends. The Celerity UFO Connector Cable easily connects to the keystone coupler with a spring-loaded connector lock to ensure a reliable connection.



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#### **UFO DisplayPort 1.4**

With the demands of the DisplayPort 1.4 interface, it has become critical for cables to support the HDMI signal and communication controls from end to end with precision. Fiber optics are the optimum connection to ensure maximum picture quality and accuracy for the DisplayPort EDID handshake. HDCP 2.2, an encryption software mandated by the film industry for viewing 4K content must interoperate to perfection or a picture will not be produced. Celerity UFO is a robust connection for all elements of DisplayPort connections.

#### 8K x 4K, and 5K Resolutions

4K video displays offer stunning picture clarity, detail and color depth. Celerity UFO ensures no loss of picture quality.

#### 24p 30p 60p Frame Rate Support

Natural and clear reproduction of motion in UHD video is critical. Celerity UFO accurately displays motion at all production frame rates.

#### **HDR Support**

HDR offers expanded contrast and color palette for a more natural viewing experience. Wide color gamut support further deepens the individual colors for stunning visual effect.

#### Available Lengths

Celerity UFO standard lengths include 35′, 40′, 50′, 60′, 80′, 100′, 130′, 160′, 200′, 500′, and 1000′. Custom lengths are available by special order.

#### Specifications

Distance up to 1000 feet
Data rate 21.6 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 HDR HDCP v2.2

BT.2020

LED status indicator at TX & RX HDMI connectors

powered LED verifies connectivity

Power TX: 0.5W RX: 0.5W; 5V DC

Temperature / Humidity -04°F - 158°F (-20°C - 70°C) / 0% - 90% RH

Cable Jacket Plenum rated
Fiber optic cable pull strength 60 pounds
Bend radius 0.20" / 5mm

DisplayPort connector dimension  $0.37" \times 0.87" \times 1.20" / 9.4 \times 22.1 \times 30.5 \text{ mm}$ Fiber optic connector dimension  $0.31" \times 0.51" \times 1.77" / 8.2 \times 12.9 \times 1.77 \text{ mm}$ 

#### Warranty

Celerity Technologies warrants this product against defects in material or workmanship for a period of 24 months from the original date of purchase. Additional warranty information can be found in the user guide.

