celeritytechnologies

Universal Fiber Optic HDMI

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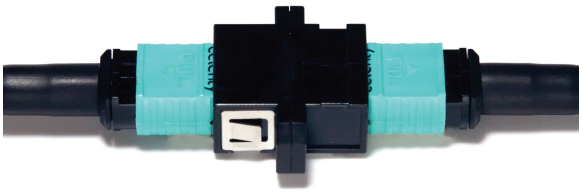
Celerity Technology
Making Fiber Easy for Beautiful Video

Celerity Universal Fiber Optic (UFO) supports HDMI 2.0 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 installations serving residential and commercial building projects for current and future needs.



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

An HDMI 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 cable and integrated 5V USB power cable for final connections at the component.

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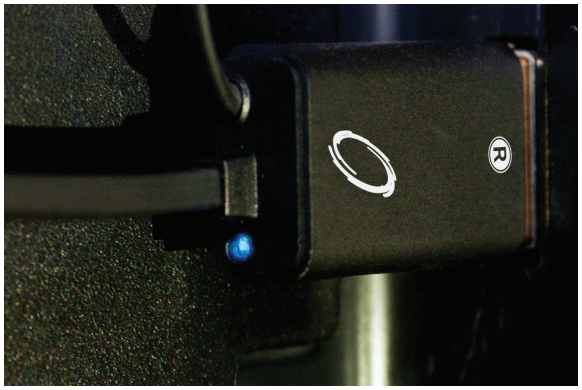
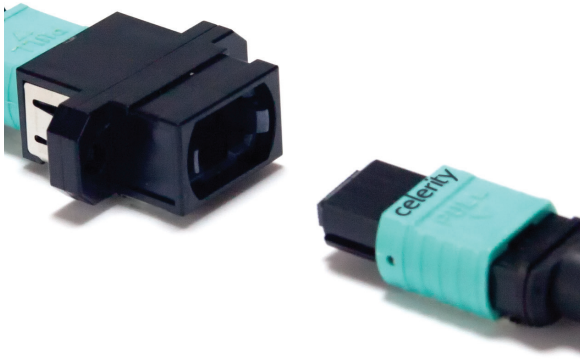
5V Power

HDMI source components (TX) supply 5V power. Celerity UFO takes advantage of this feature to draw power for the source UFO TX connector cable. A blue LED on the HDMI connector confirms power. In rare instances, the source component may not provide this signal. For this condition, A hardwired USB power cable is included to draw power externally when necessary. At the display (sink) location, the UFO RX connector USB power cable must be connected to a 5V powered USB connector located on the display panel or or projector.



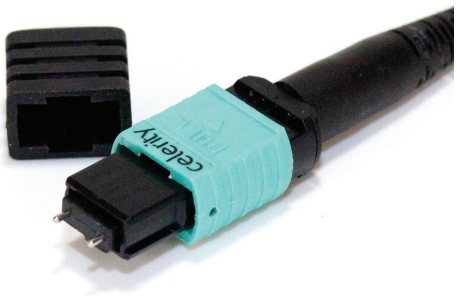
UFO Couplers

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.



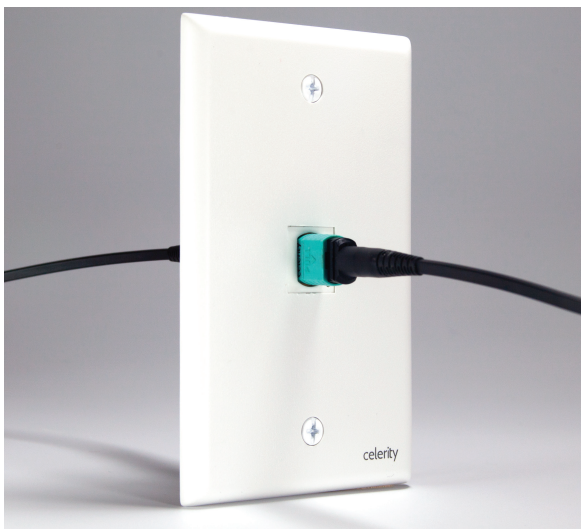
UFO Protective Caps

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 HDMI 2.0
With the demands of the HDMI 2.0 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 HDMI 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 HDMI connections.

4K Resolution
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.

Color Sampling up to 4:4:4
Color depth specifications 4:2:0, 4:2:2 and 4:4:4 are supported by Celerity UFO.

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	up to 18 Gbps
Resolution	up to 4K@60Hz UltraHD
Chroma sampling rate	up to 4:4:4
Supported features	HDMI High Speed HDR HDCP v2.2 EDID CEC BT.2020 Deep Color
Audio Return Channel	Yes
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
HDMI connector dimension	0.33" x 0.66" x 0.96" / 8.5 x 16.7 x 24.5 mm
Fiber optic connector dimension	0.31" x 0.51" x 1.77" / 8.2 x 12.9 x 1.77 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.

HDMI HIGH SPEED
CEDIA MEMBER