

ct•fiber optic gateway

control box

Celerity Technology Fiber Optic HDMI & Multiple Control Signals

Celerity Fiber Optic Gateway (FOG) is a breakthrough for high definition, long distance distribution of AV and control signals over fiber optic cable. HDMI, RS232, IR, USB HID (USB v1.1) and Ethernet 10/100BASE-T are supported up to 1000 feet over a single Celerity fiber optic cable. The combination of these functions in a sleek and slim component with fiber optic connectivity provides superior performance, bandwidth and flexibility for AV professionals to design and install high performance content and control signal distribution systems.



Supporting 4K@60Hz HDMI performance, Celerity FOG delivers 100% pure signal integrity from point to point at exceptional speed. HDMI for high definition video and multi-channel audio; IR transmission for remote control; RS232 for system control; USB HID for KVM and other interactive applications; Ethernet to deliver content and/or IP control to a smartTV or other network device, can now all be supported with a single fiber optic cable and the Celerity FOG-TXCB and FOG-RXCB transmitter and receiver control boxes. Celerity FOG-TXCB and FOG-RXCB are sold separately.

Celerity Fiber Optic Gateway Cable – 2 Steps to Fiber Optic Control

With Celerity FOG, only 2 steps are required – pre-wire and connect. Using the Celerity mini digital connector on each end of the fiber optic cable, a fast and secure connection is made to the FOG-TXCB and FOG-RXCB. This saves time and ensures that ensures a perfect fiber connection is always available. The Celerity Fiber Optic Gateway cable includes a small module at each end of the cable which supports the connection between the FOG components over the fiber. The small dimension of mini digital connector makes it easy to pull through conduit and concealed spaces.



The Celerity Fiber Optic Gateway cable is plenum-rated to meet required safety specifications and building codes. The Celerity FOG Cable is available in lengths of 35' 40' 50' 60' 80' 100' 160' 200' 500' and 1000'. Custom lengths may be special-ordered. Celerity FOG cables are sold separately from the FOG-TXCB transmitter FOG-RXCB and receiver.

Slim and Sleek Component

In addition to the easily pre-wired cable solution, the Celerity Fiber Optic Gateway Control Box has been engineered specifically to assist installers in locating the FOG-CB wherever they need control system connections. Slightly more than .5" thin, each Celerity FOG-CB offers two mounting solutions for maximum flexibility in locating the boxes. Included with each FOG-CB are mounting flanges that securely snap onto the FOG-CB to provide mounting points for equipment racks, walls, cabinets or a variety of enclosures. For more discreet mounting, the FOG-CB is designed with two keyholes on the back to allow for installation on nearly any flat surface including directly behind a video display.

ct•fiber optic gateway

control box

Specifications

Function	FOG-TXCB Transmitter	FOG-RXCB Receiver
Celerity fiber optic cable input		Celerity mini digital
Celerity fiber optic cable output		
Celerity fiber optic cable distance	Celerity mini digital up to 1000 ft	up to 1000 ft
HDMI input	HDMI Type-A	HDMI Type-A
HDMI output		
RS232	RJ45	RJ45
RS232 max baud rate	1 Mbps	1 Mbps
IR input (RX)	3.5mm TRS	3.5mm TRS
IR output (TX)	3.5mm TS	3.5mm TS
IR carrier frequency range	below 100 kHz	below 100 kHz
IR power	5V	5V
USB HID	USB v1.1 / Type-A	USB v1.1 / Type-A
Ethernet (RJ45 connector)	10/100BASE-T	10/100BASE-T
5V power	USB micro	USB micro
Supported resolutions	4K@60Hz UltraHD	4K@60Hz UltraHD
HDMI certification	HDMI High Speed	HDMI High Speed
HDMI data rate	18 Gbps	18 Gbps
HDCP v2.2	Yes	Yes
EDID pass-through	Yes	Yes
CEC	Yes	Yes
Power adapter	USB 5V/1A	USB 5V/1A
Power	DC5V 200mA	DC5V 200mA
Enclosure	Aluminum	Aluminum
Dimensions (in & mm)	16mm x 60mm x 136mm 0.62" x 2.36" x 5.35"	16mm x 60mm x 136mm 0.62" x 2.36" x 5.35"
Shipping weight (lbs & kg)	0.5 lbs / 0.23 kg	0.5 lbs / 0.23 kg

Included Items

Fiber Optic Gateway Transmitter (TX)

- 1 each:
- FOG-TXCB
 - Mounting brackets
 - USB power cable (1.5m)
 - USB-AC power adapter (5V/1A)
 - IR emitter cable with 3.5mm plug (TS, 5V)
 - IR receiver cable with 3.5mm plug (TRS, 5V)
 - USB to USB cable
 - User guide

Fiber Optic Gateway Receiver (RX)

- 1 each:
- FOG-RXCB
 - Mounting brackets
 - USB power cable (1.5m)
 - USB-AC power adapter (5V/1A)
 - IR emitter cable with 3.5mm plug (TS, 5V)
 - IR receiver cable with 3.5mm plug (TRS, 5V)
 - User guide

Fiber Optic Gateway Cable

Available lengths

10.6m	35f	30.4m	100f
12.2m	40f	48.7m	160f
15.2m	50f	60.9m	200f
18.2m	60f	152.4m	500f
24.3m	80f	304.8m	1000f

Custom lengths

Available in 50' (15.2m) increments from 250' to 950'
(76.2m to 290m)

Fiber optic connector dimension: 8.2mm x 10.7mm x 25.5mm

