



## Features

- Supports resolutions to 4K/UHD 3840x2160/30Hz
- HDMI units extend HDMI 1.4b and supports HEAC (HDMI / Ethernet / Audio Return Channel / Control)
- Supports remote KVM with USB-HID (for keyboard / mouse)
- Optional USB 2.0
- Supports uni-directional Stereo Analog Audio
- Supports the extension of HDMI, Audio, USB and 10/100 Ethernet up to 100 meters on a single CATx cable using HDBaseT
- Compatible with Genesis XD matrix switches for point-to-multipoint applications

## Applications

- Digital Signage / Remote Kiosks
- Command & Control
- Live Events
- Video Conferencing
- Houses of Worship
- Auditoriums
- KVM Extension

## 4K UHD Multimedia Transport

EMCORE's Optiva OTC-HDMI2A-USB-ETH provides multimedia extension of 4K video along with audio, Ethernet and USB for keyboard and mouse. Optiva OTC-1HDMI2A-USB-ETH transmitters and receivers can be used for simple point-to-point connectivity over a single CAT5e/6 cable or for point-to-multipoint systems by connecting them to our Genesis XD matrix switches utilizing the compatible HDBaseT CATx modules. The Genesis XD is an all in one converting, switching, and routing platform for small, medium and large distribution systems.

The Optiva OTC-HDMI2A-USB-ETH is a single CATx/HDBaseT extender that supports HDMI 1.4b (Audio Return Channel [ARC] is supported). It also supports stereo analog audio, 10/100 Ethernet and USB for keyboard and mouse control. A single CATx cable extends these signals up to 100 meters away.

Our innovative Optiva video, audio and data media transport system was designed to maintain lossless fiber extension between input and output signals. The Optiva OTC-HDMI2A-USB-ETH includes built-in emulation for HID at both transmitter and receiver sides. This feature is important when the product is used together with an HDBaseT switch when HID's are changing on the fly. USB-HID emulation allows seamless and continued operation without the need for rebooting the system when human interface devices are continually connected and unconnected.

The Optiva line of products also includes insert cards for up to 16 channels of multiplexing / demultiplexing, 16x16 matrix switching, optical add/drop, as well as remote system monitoring.

## System Design

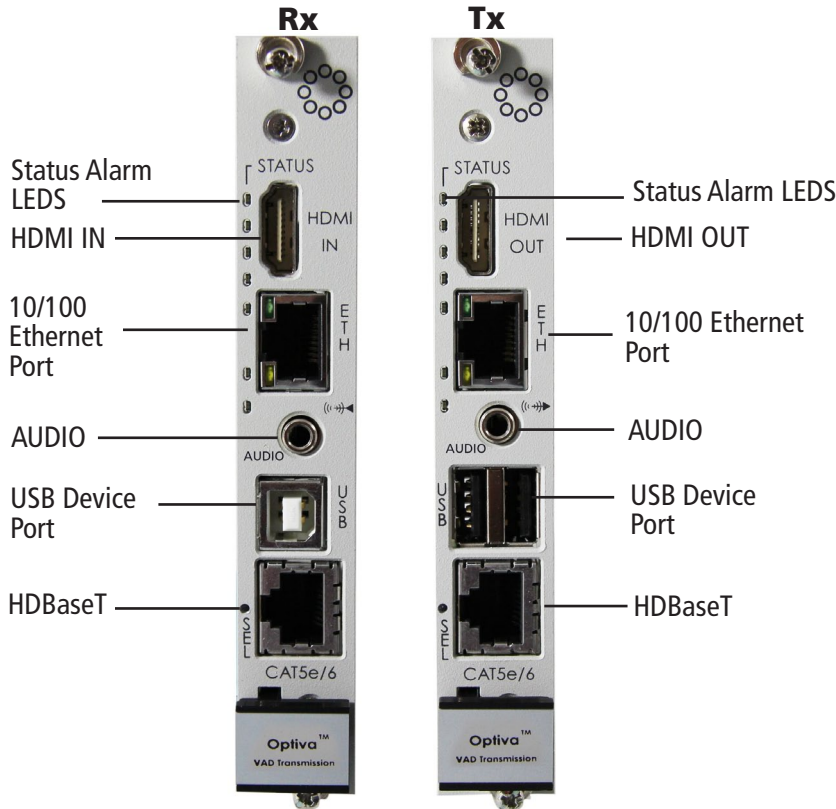
Optiva insert cards support both 19" **optiva** PLATFORM rackmount and compact tabletop or wall-mountable enclosures. The 3RU 19" rackmount enclosures (Models: OT-CC-16 & OT-CC-16F) can support up to 16 insert cards as well as dual-redundant, hot-swappable power supplies utilizing two 100 watt or two 200 watt power supplies. Also available in the rackmount form factor is our 1RU enclosure (Model: OT-CC-6-1U) which can accommodate six insert cards and utilizes two 60 watt power supplies. For desktop or wall mounting applications there are one-slot (Model: OT-DTCR-1) and two-slot (Model: OT-DTCR-2) enclosures. Both use an external wall mount power supply.

**DATASHEET** CATx/HDBaseT

**Models**

Transmitter	Receiver
OTC-HDMI2AT-USB-ETH	OTC-HDMI2AR-USB-ETH

**Connection Diagram**



**Video**

Specifications	Values
Inputs/Outputs	HDMI 1.4b
HDCP Compliance	V1.2
EDID	Plug & Play
Color Depth	24-bit
Resolutions Supported	HD up to 1080p, 4K/UHD up to 3840x2160/30Hz

**Audio**

Specifications	Values
Audio Inputs	Uni-directional (tx to rx) 2ch Stereo Analog Audio
Audio Outputs	2ch Stereo Analog Audio

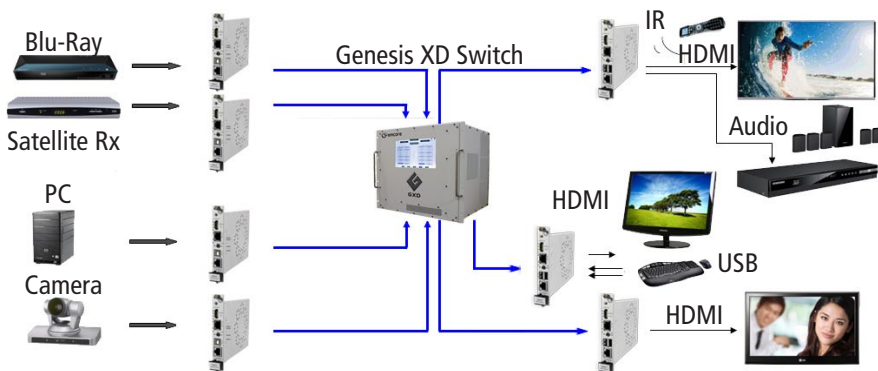
**Data & Control**

Specifications	Values
USB	USB-HID, USB 2.0 optional
USB Connector	TX: 1x USB type B RX: 2x USB type A
Ethernet	10/100

**General**

Specifications	Values
Dimensions (Insert Card)	6.3"D x 0.8"W x 4.0"H
Weight	11 oz.
Operating Temperature	0° to +50°C
Storage Temperature	-30°C to +85°C
Humidity	0 to 95% (non-condensing)
Power Consumption	<6 Watts
Warranty	3 Years

**Point-to-Multipoint Applications with Genesis XD**



Compliance (Pending)

