opticomm emcore empower with light™

EVE-HD & EVD-HD
Eclipse HD, HDMI, USB, Audio, RS-232
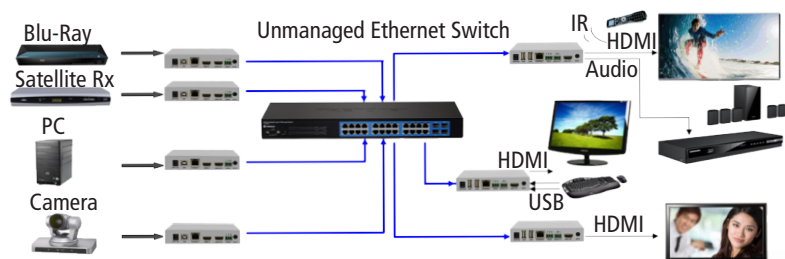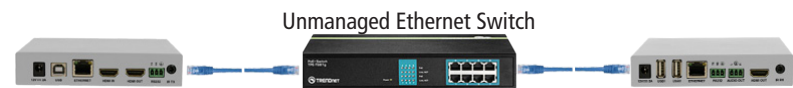## Transport Link Over CATx to 100 Meters

HDMI, USB, Audio, RS-232 and IR over IP

EMCORE's Eclipse HD Series, the EVE-HD Encoder and EVD-HD Decoder, allow simultaneous distribution of HDMI 1.3 with HDCP, USB, Audio, RS-232 and IR over a dedicated IP network. Resolutions up to 1080P/60Hz and 1920x1200/60Hz are transmitted in high-quality, visually lossless fashion over a single CATx cable up to 100 meters point-to-point, or over kilometers by stacking Ethernet Switches with fiber connectivity.

Eclipse HD is the perfect solution for distributing HD content from multiple sources to multiple displays using a dedicated LAN. By cascading Unmanaged Ethernet Switches, a variety of matrix sizes can be achieved. Anywhere there is an IP/Ethernet connection, HD content can be distributed.

The IR interfaces on the encoder and decoder are used to remotely control sources such as Blue-ray players, A/V receivers and set-top boxes from any location in the IP network. The Eclipse HD supports USB 2.0 for keyboard and mouse control making it the perfect solution for KVM over IP.

Features

- Supports 1080P/60Hz and 1920x1200/60Hz extension up to 100m in a point-to-point configuration

- KVM over IP using HDMI with HDCP and USB

- Supports seamless one-to-many switching using Unmanaged Gigabit Ethernet Switches

- Supports video wall processing using Eclipse HD PC software

- Supports POE (Power over Ethernet)

- Encoder provides HDMI loopback for local monitoring

- Decoder provides separate stereo audio output for HDMI de-embedded audio

- Control via IR remote control, RS-232 software control or Web-based UI

Applications

- Home Theater

- Video Conferencing

- Digital Signage

- Distance Learning

- Command and Control Centers

- KVM Extension over IP

Point-to-Point and Point-to-Multipoint Applications

Unmanaged Ethernet Switch

Blu-Ray
Satellite Rx
PC
Camera
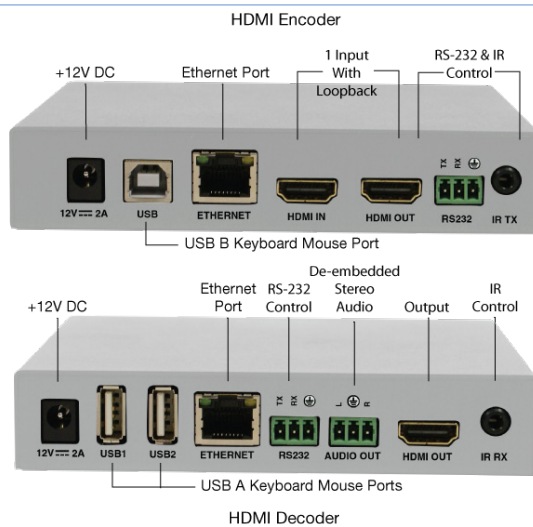
Unmanaged Ethernet Switch

IR
HDMI
Audio
HDMI
USB
HDMI

EVE-HD & EVD-HD
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Transport Link Over CATx to 100 Meters

Ordering Information

Model	Description
EVE-HD	Encoder, HDMI, USB, Audio, RS-232 and IR over IP
EVD-HD	Decoder, HDMI, USB, Audio, RS-232 and IR over IP

Connection Diagram

HDMI Encoder

USB B Keyboard Mouse Port

HDMI Decoder

USB A Keyboard Mouse Ports

Video Wall Support

Built-in video wall support stretches a 1080P image to fill the wall, multiple images can share the wall horizontally or diagonally (not vertically), or each screen can display a separate image, with simple drag-and-drop functionality. Different views can be saved and switched in seconds with fast API command communications over Ethernet, using the included GUI.

Encoding & Decoding

Specifications	Values
Video Resolutions	1080P, 1080i, 720P, 576P, 480P, 576i, 480i, 1920x1200
Frame Rate	60 Hz

Video

Specifications	Values
Video Input	HDMI 1.3
Input Video Signal	0.5-1.0 volts p-p
Input DDC Signal	5 volts p-p (TTL)
Video Output	HDMI 1.3 + HDCP
Maximum Transmission Distance	100 meters (point-to-point)
Encoder Video interfaces	1 input with loopback
Decoder Video interfaces	1 output

Audio

Specifications	Values
Audio Input	5.1 PCM
Audio Output	De-embedded stereo

Data & Control

Specifications	Values
USB	USB 2.0 (HID, keyboard and mouse)
USB Connector	1x USB type B (Tx) / 4x USB type A (Rx)
IRD	Uni-directional IR
IRD connector	3.5mm
RS-232 Connector	3-pin Terminal Block

General

Specifications	Values
Operating Temperature	-5 to +35°C (-41 to +95 °F)
Operating Humidity	5 to 90 % RH (no condensation)
Power Supply	12VDC
Power Consumption	5Watts (Tx) / 5Watts (Rx)
Dimensions (HxWxD)	131mm × 115mm × 25mm 4.53" x 5.16"× 0.98"
Weight	0.9Kg / 1.98lb (Pairs)

Network & Control

Specifications	Values
Network Interface	1x 10/100/1000 Base, RJ45 (Tx) / 1x 10/100/1000 Base, RJ45 (Rx)
Remote Monitoring & Control	Internal web server/GUI, IR remote control, RS-232

Compliance