Product Datasheet

HD over IP Encoder/Decoder

Overview

The VX-HDV-IP modular JPEG 2000 IP encoder/decoder system for HD video and audio is configurable as an encoder or decoder. It receives and compresses the incoming video signal and transmits it via LAN or WAN.

Choose from two video interface modules: DVI-I and 3G-SDI. Add simple adapters to support HDMI and VGA transmission.

Basic Features

- Provides HD image quality for professional applications.
- Very low latency.
- Enables interface mixing within the same installation, such as from an HD-SDI source to an HDMI device.
- Delivers full HD 1080p/60 Hz video streams, maintaining signal quality via conventional 10/100/1000BASE-T networks.
- Supports USB for keyboard and mouse emulation.
- Interconnect encoders/decoders via existing LANs and WANs or by Internet.
- Works in point-to-point or multipoint configurations.

What's Included

NOTE: For a complete list of what's included for each product code, go to page 2.

Specifications: VX-HDV-IP Encoder/Decoder

Approvals	CE, RoHS
Audio Channels	6 in same direction as video 16 in opposite direction to video
Audio	Coding: Maximum: 32 Bit, uncompressed; Sampling rate: Maximum: 192 kHz
Bandwidth	1–800 Mbps
Color Depth	Up to 12 Bit/component
Compression Process	JPEG2000
Delay	Per device: 1.5 frames (= 25 m s@ 60 Hz); Total delay: Approx. 3 frames (=50 ms @ 60 Hz) + network delay
Frame Rate	Maximum: 72 Hz; Minimum: 4 Hz
Management	Internal Web server, SNMP v1, v2, v3
Pixel Clock	Maximum: 150 MHz; Minimum: 25 MHz
Video Resolution	Maximum: 1920 x 1080p; Minimum: 640 x 480i
Connectors	Network Interface: (1) 10/100/1000BASE-TX RJ-45; Data interface: USB 2.0, (2) USB plug type A (keyboard and mouse only)
Temperature	Operating: -14 to +140° F (-10 to +60° C)
Power	(2) 12-VDC ± 10%, 13 W power supplies
Dimensions	1.6"H x 8.3"W x 8.2"D (4.2 x 21.1 x 21 cm)
Weight	2.8 lb. (1.3 kg) (not including interface module)

Specifications: VX-HDV-IP-SDI, HD-SDI Card

Resolution	Maximum: 3G-SDI (SMPTE424M)
Connectors	(4) BNC: (1) BNC video in (for encoder) or gen-lock; (1) BNC video out (for loopback); (2) BNC video out (for decoder)

Specifications: VX-HDV-IP-HDMI, HDMI/DVI/VGA Card

HDCP Support	Yes
Connectors	(1) DVI-I video in (for encoder); (1) DVI-I video out (for decoder); *NOTE: Includes HDMI interface adapter plug.* *DVI interface direct connection.* *VGA interface VGA signal receivable but not* *transmittable.*

What's Included

VX-HDV-IP

• VX-HDV-IP housing

• (4) rubber feet (for tabletop mounting)

• (1) DVI to HDMI interface adapter

• User manual

VX-HDV-IP-SDI

• Video board (3G-SDI)
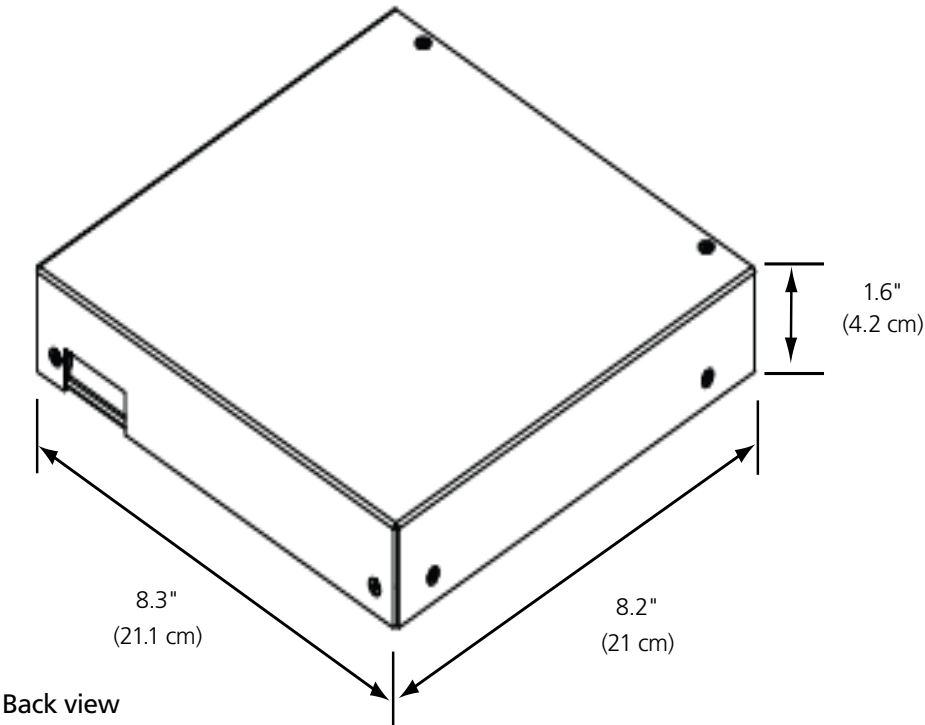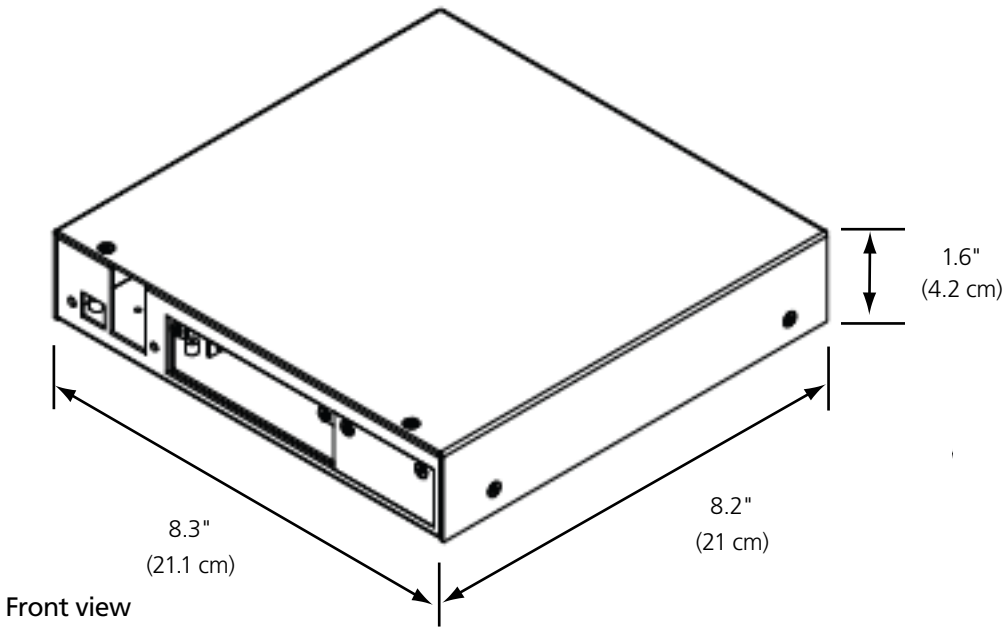
VX-HDV-IP-HDMI

• Video board (DVI-I)

VX-HDV-IP-PSU

• (1) 12-VDC external power supply (VX-HDV-IP-PSU)

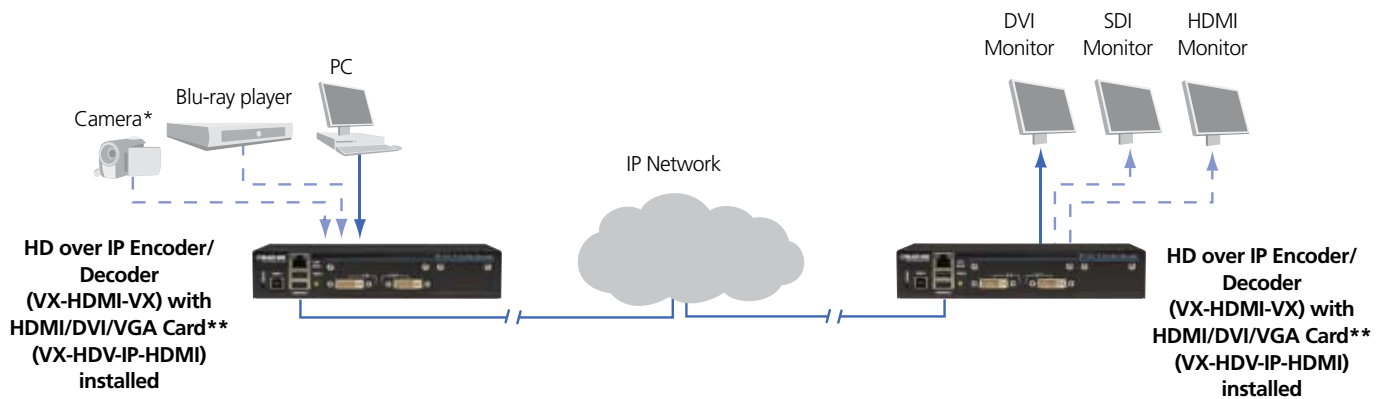**VX-HDV-IP-RM**

• 19" rackmounting kit (VX-HDV-IP-RM)

Item	Code
Order the base unit...	
HD over IP Encoder/Decoder Base Unit	**VX-HDV-IP**
Equip the base unit with an SDI or HDMI card...	
SDI Card	**VX-HDV-IP-SDI**
HDMI/DVI/VGA Card	**VX-HDV-IP-HDMI**
Also sold separately...	
Power Supply	**VX-HDV-IP-PSU**
Rackmount Kit	**VX-HDV-IP-RM**
You might also need...	
DVI-I Male to VGA HD15 Female Adapter	**FA461**
DVI-I Male to HDMI Female Adapter	**FA795-R2**

Dimensional diagram of the HD over IP Encoder/Decoder.

1.6"
(4.2 cm)

8.3"
(21.1 cm)

8.2"
(21 cm)

Front view

1.6"
(4.2 cm)

8.3"
(21.1 cm)

8.2"
(21 cm)

Back view

HD over IP Encoder/Decoder

A typical application of the HD over IP Encoder/Decoder is shown below.

DVI
Monitor

SDI
Monitor

HDMI
Monitor

PC

Blu-ray player

Camera*

IP Network

HD over IP Encoder/
Decoder
(VX-HDMI-VX) with
HDMI/DVI/VGA Card**
(VX-HDV-IP-HDMI)
installed

HD over IP Encoder/
Decoder
(VX-HDMI-VX) with
HDMI/DVI/VGA Card**
(VX-HDV-IP-HDMI)
installed

NOTES:

1. Only one input and one output can be connected at a time. For example, you can connect a PC to a DVI monitor via a pair of HP over IP Encoder/Decoders (with HDMI/DVI/VGA Cards [VX-HDV-IP-HDMI] installed) over an IP network.

**2. If you want to connect an SDI source to the HP over IP Encoder/Decoder, you must install SDI Cards (VX-HDV-IP-SDI) in the base unit (VX-HDV-IP) instead of the HDMI/DVI/VGA Cards shown in the diagram above. The input and output cards do not have to be identical. For example, you can run an SDI input and output it as DVI/HDMI/VGA.*

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