

## 4-Megapixel Ultra HD streaming over IP Networks

### IPVS V<sub>2</sub>D XP 200 Ultra HD Encoder/Decoder

IP Video Systems' V<sub>2</sub>D XP 200 with integrated multi channel, dual link DVI functionality of Ultra HD encoding (Tx) and decoding (Rx) in a single unit, delivers real-time streaming of 4 megapixel resolution graphics and video over IP networks with higher frame rates.



**V<sub>2</sub>D XP 200** Ultra HD Encoder/Decoder

Applications include networked simulation, graphics application sharing and remote surgical intervention. The V<sub>2</sub>D XP200 promotes unparalleled video streaming and collaboration capabilities, with real-time video and graphics, audio and remote keyboard/mouse control creating a completely interactive experience among users on a global basis.

The V<sub>2</sub>D XP 200 product incorporates state-of-the-art encoding and decoding technologies optimized for netcentric simulation and high-end visualization applications, integrating video, audio and control data on a robust and easy-to-use platform.

The systems can be connected to Ethernet local area network, campus and metro networks as well as wide area IP networks, supporting networked simulation, distributed visualization, telepresence and remote TeleCollaboration<sup>™</sup> over any distance.

The V<sub>2</sub>D XP 200 integrates 2 dual-link DVI channels allowing configuration of Tx's and Rx's in any combination: 1 Tx and 1 Rx, 2 Tx's, or 2 Rx's in a single-rack mount unit (1 RU). The software controlled configuration offers convenience and flexibility of a multi channel or bi-directional high resolution video, graphics and audio extender, allowing configured locations to view and control the graphics and video in real time. Multiple remote locations can simultaneously view and control the source application using only a display, keyboard, and mouse.



**V<sub>2</sub>D XP200** Backpanel Interface

### Product Features

- Dense form Factor (DFF)
  - Integrated Tx and Rx function in 1 RU
  - 1 Tx plus 1 Rx or, 2 Tx's or 2 Rx's in one unit
- Ultra HD Performance with 4-megapixel high resolution graphics modes
  - 2560 x 1600 and beyond
- Higher frame rates on 2 mega-pixel modes:
  - 1280 x 1024 @ 72 fps (frames per sec)
  - 1600 x 1200 @ 48 fps
  - 1920 x 1080 @ 48 fps
- 3D stereoscopic graphics support
- Transmission over any Ethernet network
  - IP LAN and WAN configuration
- Unicast/multicast support
- Extensive Quality of Service (QoS) support
  - Rate limitation and control
- Network congestion avoidance mechanisms
  - Resilient against packet loss
- Complete remote interactivity
  - Keyboard/mouse, USB and RS232 support
- Integrated point-to-point stereo audio
- True plug-and-play design
  - Host hardware and software independent
  - Projection system independent
  - Resolution/refresh rate independent

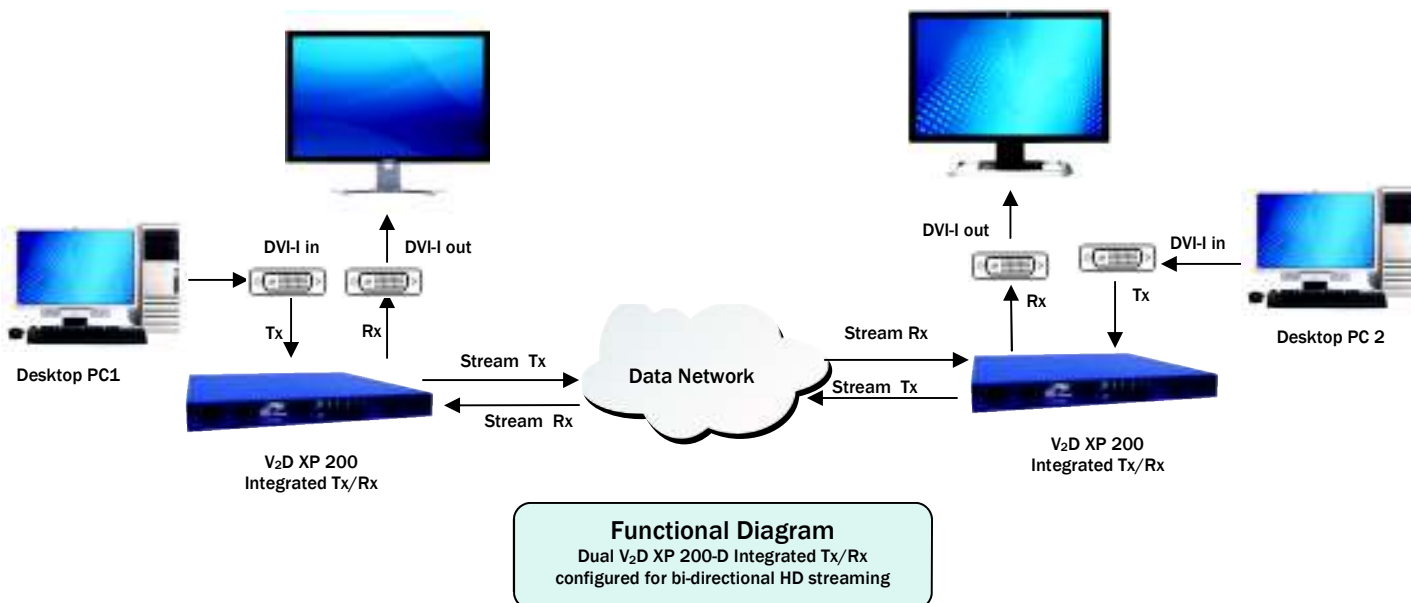
### Applications

- Global visual collaboration
- Networked simulation
- Broadcast/multicast graphics and video
- TeleCollaboration<sup>™</sup>
- Surveillance and reconnaissance
- Interventional Surgery
- Digital Cinema
- Apple Cinema 30" LCD Display support
- Desktop visualization for distant learning

### Benefits

- Visual decision making on global basis
- Digital compression and transmission:
  - No distance-dependent degradation
- Flexible architecture, Point-to-point
  - Point-to-multipoint (IP multicast)
- Complete recording, relay, streaming and media distribution solution when configured with IP Video Systems' Digital Media Servers
- Synchronized recording/viewing on multiple V<sub>2</sub>D Rx and software PC clients

## V<sub>2</sub>D XP 200 Technical Specifications



### Inputs and Outputs

#### Video

Video resolution 3840 x 1200, 2560 x 1600, 1920 x 1200, 1920 x 1080, 1800 x 1440, 1600 x 1200, 1280 x 720, 1280 x 1024, 1024 x 768, 800 x 600, 640 x 480

Horizontal frequency Up to 110 kHz

Maximum Clock rate 270 MHz

Input/output signal TMDS (DVI-I), RGBHV

Connector type 2 Dual-link DVI-I (Rx and Tx)

Local Monitor Loopback

Compression Advanced visualization with intelligent frame differencing and configurable, progressive spatial compression

#### Audio

Line in/out 2 channel (3.5 mm stereo jack)

#### Serial Port

Connector type 1 full duplex RS-232 compliant

#### Keyboard and Mouse

Output on Tx 2 PS/2, 2 USB connectors

Input on Rx 2 PS/2, 2 USB connectors

#### Network Interface

Interface type 10/100/1000BaseT

Connector type RJ45

### Network Connectivity

#### Ethernet Protocol

Traffic type

Variable bit-rate with configurable maximum and burst rate settings. Configurable fixed frame rate settings

Frame Rate

IP Protocols Protocol

IP Parameters manual or automatic configuration via DHCP. Multicast via IGMP with multicast routers Mechanism coping with packet loss and network latency/jitter. Configurable update rate optimization

QoS

#### Management

Interfaces

Commands

RS232, telnet, SSL, TFTP, SFTP, SSH IMS web-based management and menu-based system

Configuration data

Stored on removable Compact Flash card

#### Certification and Compliances

Safety:

UL/CSA/EN/IEC 60950-1 CB report

EMC:

CE, FCC Part 15 Class A, CISPR 22, ICES-003

#### General

Power

100 VAC to 240 VAC, 50/60Hz

Form factor

19" rack-mountable

Dimensions (H x W x D) 1.75" x 17.40" x 18.0"

(44.5 mm x 442 mm x 452 mm)

Weight

18 Lbs (8.16 Kg)



Enabling the  
**Advanced Visual Enterprise**

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