Desktop Form Factor—Ultra HD Encoder/Decoder

IPVS V_2D XP 220 Ultra HD Encoder/Decoder

IP Video Systems' V_2D XP 220 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 at high frame rates over IP networks.

V2D XP 220 Ultra HD Encoder/Decoder

The V_2D XP 220 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 V_2D XP 220 Desktop Form Factor design offers a smaller footprint and quiet fan design allow the XP-220 to be integrated in TeleCollaboration(TM) environments like conference areas and meeting rooms where low noise levels are desired.

The V_2D XP 220 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 desktop unit. 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.

The XP-220 can be connected to Ethernet local area, campus and metro networks as well as wide area IP networks, supporting networked simulation, distributed visualization and remote TeleCollaboration(TM) over any distance. Applications include networked simulation, graphics application sharing and remote surgical intervention. The V_2D XP220 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.

Product Features

- Desktop form factor
  - Small Foot Print and Quiet Fan Design
- Integrated Tx and Rx function in a Compact Desktop chasis
  -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 megapixel modes:
  - 1280 x 1024 @72Hz,
  - 1600 x 1200 @ 48Hz
  - 1920 x 1080 @48Hz
- 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

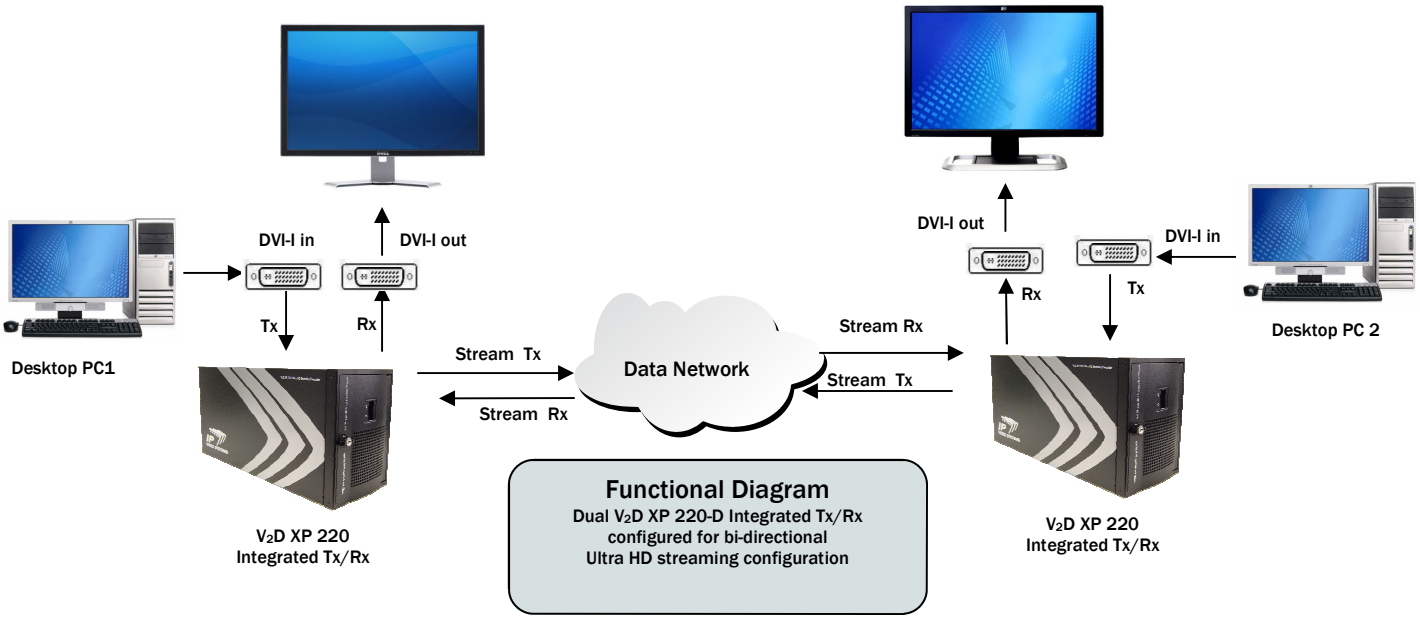
Applications

- Projection system independent
- Resolution/refresh rate independent
- Global visual collaboration
- Networked simulation
- Broadcast/multicast graphics and video
- TeleCollaboration(TM)
- Surveillance and reconnaissance
- Interventional Surgery
- Digital Cinema

Benefits

- Apple Cinema 30" LCD Display support
- Desktop visualization for distant learning
- 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

V2D XP 220 Technical Specifications



Inputs and Outputs

Video

Video resolution‡	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

‡ *Firmware supporting video resolution above 4 mega-pixel available Q4'08*

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 ad 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.
Frame Rate	Configurable fixed frame rate settings

IP Protocols

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

Management

Interfaces	RS232, telnet, SSL, TFTP, SFTP, SSH
Commands	IMS web-based management and menu-based system
Configuration data	Stored on removable Compact Flash card

Certification and Compliances

UL and FCC (preliminary) UL60950/FCC Part 15 Class A

General

Power	100 VAC to 240 VAC, 50/60Hz
Power Dissipation	100 Watt - dual channel configuration
Desktop Form factor	1/2 width rack-mountable
Dimensions (H x W x D)	6.3" x 9.0" x 17.65" (160 mm x 219 mm x 448 mm)
Weight	*TBD*

IP VIDEO SYSTEMS

Enabling the
Advanced Visual Enterprise

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