Digicom XLAN Processor

DIGITAL VIDEO TRANSMISSION - High Capacity IP Video Access, Flexible Configuration, and High Scalability

Digicom XLAN

Digicom XLAN captures RGB/DVI and video signals from a range of input sources which also include computers and cameras. All the video signals are digitized and transmitted over the conventional IP network, and ultimately shown on the video wall, bringing together the perfect hybrid experience of AV and IT.

The Digicom XLAN is perfectly designed for the security and monitoring control room markets with requirements for handling hundreds of video signals. VTRON developed the Digicom XLAN Processor to cater to this increasing demand for high capacity IP Video signals processing of professional command and control room markets.

The Digicom XLAN Processor handles not only an enormous number of channels both analog and digital video signals, but also various types of other conventional video signals.

Main Features:

- Enormous Multichannel IP Video Processing Capacity
- Ultra High Resolution Desktop and Application Display on Single Logical Screen
- Digital Distributed Processing Structure Design
- Modular Design, Easily Upgraded, with Strong Expandability
- Fully Digital Processing without Signal Format Conversion

VTRON

Digicom XLAN Processor

Enormous Multichannel IP Video Processing Capacity

The Digicom XLAN Processor has powerful IP Video signal processing and display capacity. It supports mainstream video coding standards and protocols. Up to 400Mbps IP Video signals are being processed by one Digital Video Processor simultaneously, and 16 channels of QCIF video (or 1 channel of 1080P video or 4 channels of 4CIF video or 9 channels of CIF video) can be simultaneously displayed on each cube. Zoom-in, zoom-out, cross-screen roaming or full screen display of the IP Video signal window can be realized on the display wall. The Digicom XLAN Processor is compatible with more than 95% of IP Video coding standards and protocol via SDK provided by customers.

Ultra High Resolution Desktop and Application Display on Single Logical Screen

Digicom XLAN Processor outputs a super high resolution Windows as a single logical screen desktop. It supports high resolution display and processes various Windows applications. The resolution of the logical screen is the summation of all the display units' resolutions. Composite video, RGB signal, network computer signal, and IP Video signal with different video coding standards, can be transmitted and displayed at any size; in any position on the logical screen. The relevant windows also feature free roaming and zooming functions.

Digital Distributed Processing Structure Design

Digicom XLAN Processor adopts a distributed data processing structure. The signals of the whole system are processed by each display node respectively. The signal processing of the system is at high performance as the processing units are distributed in numbers of "node device" for share loading and resources balancing. The larger the system is, the more display nodes there are, and then the stronger the processing capacity will be. Whatever the system scale, it can still offer outstanding performance and high processing speed.

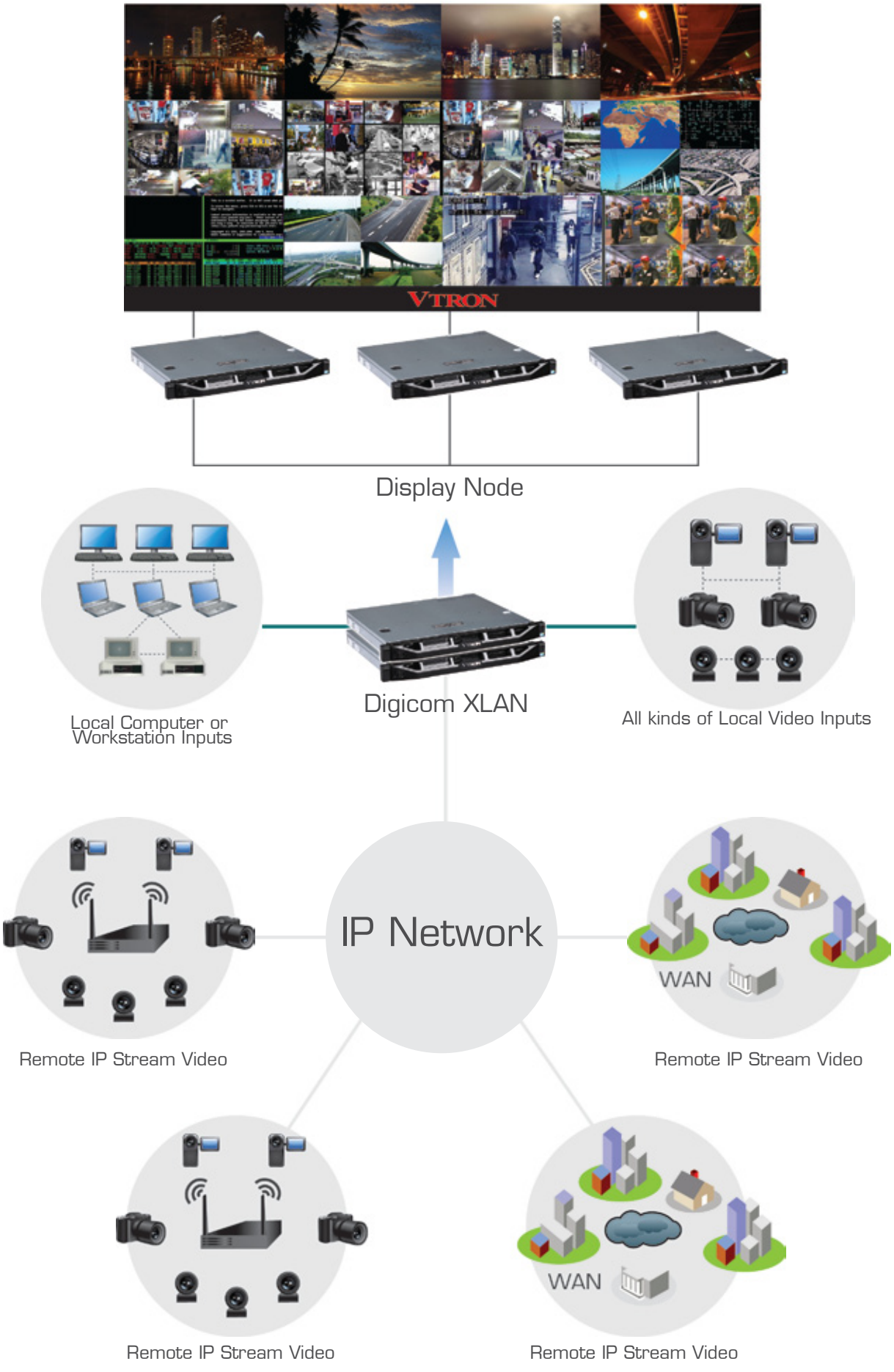
Modular Design, Easily Upgraded, with Strong Expandability

With the modular design, distributed structure, efficient data exchange system, the system maintenance and upgrading can be easily realized. The hardware adopts standard mechanical structure, while the software adopts the modular function design. Users only need to add the corresponding signal collection module to expand the system capacity.

Fully Digital Processing without Signal Format Conversion

The IP Video signal can be processed by the Digicom XLAN Processor directly without format conversion, which assures high display speed, high quality images, and saves on hardware resources.

Typical Design :



Specifications Digicom XLAN 800 Processor

Specifications	
CPU	Intel Core Dual cores 3.1GHz (XLAN 800C, XLAN D01, XLAN N02) Intel Xeon Quad cores 2.4G (XLAN R02)
Memory	Server: 4GB DDR3 1333MHz Node: 2GB DDR3 1333MHz Supports ECC
I/O	USB2.0 x 4
Network Interface	Dual Gigabit RJ45 ports, 100 / 1000M Adaptive Ethernet port
Power Supply Input Voltage	AC 100-240V Frequency: 50 / 60 Hz, Control/Application Server ≤200W Current: 4A
Dimension (W×H×D)	431mm x 42.6mm x 393.7mm (except DVS) 19" standard chassis, single chassis of 1U height
Weight	≤10Kg
Operating Temperature	0°C – 40°C
Operating Humidity	20%-90% (Non-condensing)
Qualifications	CCC, CB, CE, RoHS
Main Control Server (XLAN 800C) & Application Server (XLAN D01)	
HDD	2 x 250G (SATAII), 8M / 7200 rqm
Optic Drive	DVD-ROM, 16x, SATAII
Network Interface	Dual Gigabit RJ45 Network ports, 100 / 1000M Adaptive Ethernet port One set of Dual Network ports card can be expanded in Main Control Server (optional) Up to 4 different networks can be defined simultaneously
Desktop & Network Application	Supports single uniform super high resolution logic screen under the Windows application environment Quickly display of the Network Signal by VlinkExpress™ software
Digital Video Server (XLAN 800V)	
IP Video Signal Input	Capacity of processing the IP video: Up to 400 Mbps
	Frame Rate: Up to 30fps
	Coding Format: H.261, H.263, H.264 / JPEG / MJPEG / MPEG1, MPEG2, MPEG4 / WMV1, WMV2, WMV3 and etc
	Can be secondly developed via the SDK provided by the customer
	IP Video Transmission Protocol: Standard HTTP, RTP / RTSP
RGB Server (XLAN R02)	
RGB Signal Input	2 RGB signal inputs per card, one card per server Resolution: 640x480@60Hz~1920x1200@60Hz Color Depth: 16 / 24bits
Frame Rate	Static Picture (1024x768 pixels): no less than 15fps Moving Video (1024x768 pixels): no less than 30fps
Display Node (XLAN N02)	
Signal Output	Output Connector: Dual DVI-I Slot: PCI-E 2.0 16X
	Resolution: 1024x768@60Hz, 1400x1050@60Hz, 1366x768@60Hz, 1920x1080@60Hz Color Depth: 32 bits
	Display Memory: 256M GDDR2
Output Channel	Each output can display of 2 channels of 1080P video, or 9 channels of 4CIF video or 16 channels of CIF video simultaneously.
Analog Video Server (DVS)	
Analog Video Signal Input	16 max Analog Video inputs per server, connector: BNC Resolution: 4CIF, CIF, QCIF Format: PAL, NTSC Adjusted Specifications: channel, format, resolution, contrast, brightness, chroma, frame rate
Serial Port	1 x RS485, 1 x RS232 (DB9)
Network Interface	1 x RJ45, 100/1000Mbps adaptive
Power Supply Input Voltage	AC 100-240V Frequency: 50 / 60 Hz ≤40W Max Current: 2A
Dimension (W×H×D)	440mm x 45mm x 300mm 19" standard chassis, single chassis of 1U height
Operating Temperature	0°C – 40°C
Operating Humidity	20%-90% (Non-condensing)
Weight	≤5Kg

* The above specifications may be subjected to change without prior notice.

Component of the XLAN 800 Processor	
Number of Outputs	Max 80 outputs
Standard Configuration	Digicom XLAN 800C + XLAN 800V + 48 ports 1000M Network Switch
Display Node (XLAN N02)	2 outputs per node
RGB Server (XLAN R02)	0~32 sets
Digital Video Server (XLAN 800V)	0~32 sets
Analog Video Server (DVS)	0~32 sets
Application Server (XLAN D01)	0~1 set

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