



# NPX 3000

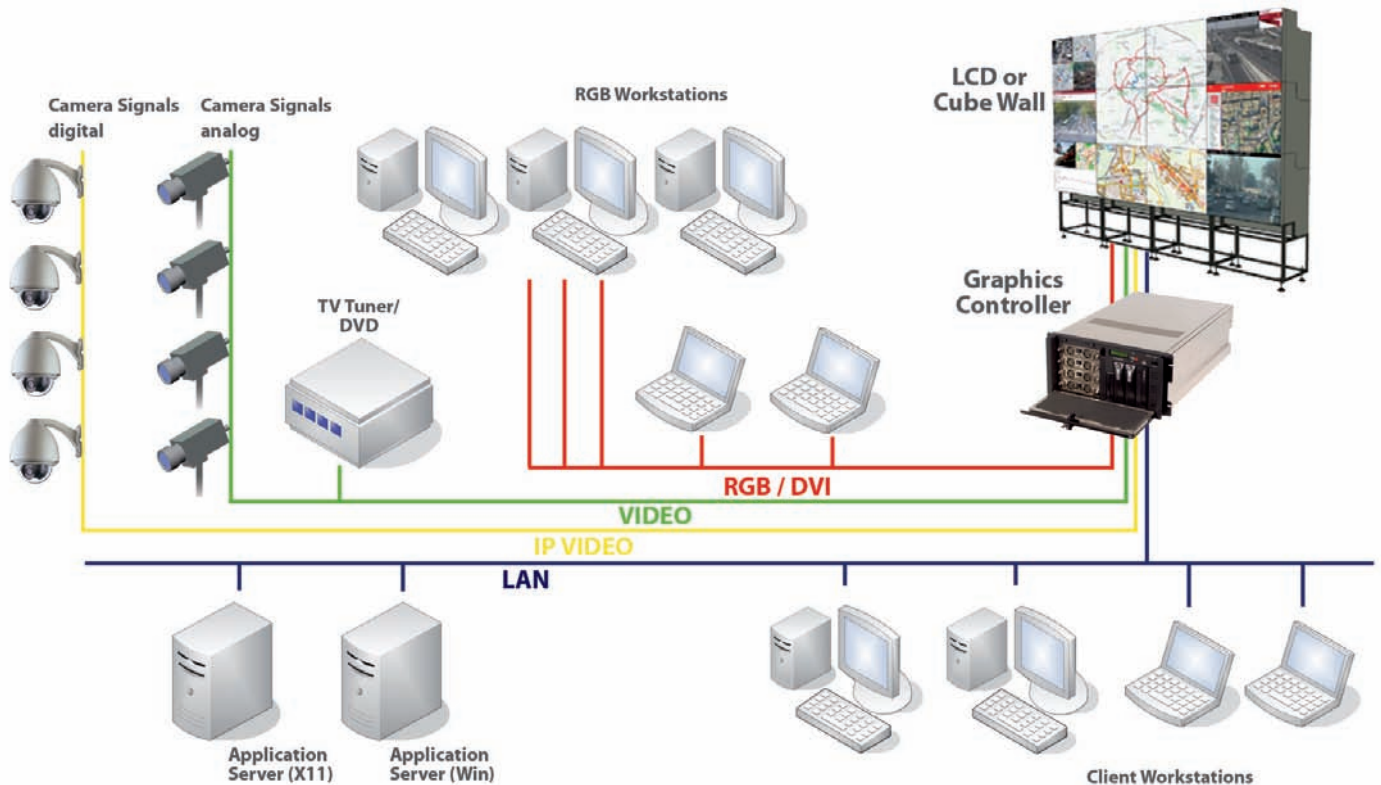
Network-based Graphics Controller

netpix 3000 is a network based graphic controller for the management of large screen displays or single projectors. Through its MultiScreen-ability any display surfaces can be realized. The controller creates a big joined desktop for network-applications, video and graphic sources. At the heart of the NPX 3000 works the most powerful INTEL® XEON® QUAD CORE CPU architecture of any display processor in its class. The new NPX 3000 Controller offers an ultra high performance bus, 64Bit technology and the world's first 512-bit graphic GPU.

These new technologies guarantee the revolutionary and powerful performance of the NPX 3000 in any control room application.

The NPX 3000 provides multiple analog and digital video and graphic connectivity with input cards. Through the new NPX High-Speed-Interconnect-Bus (NPX-HSIB), video and graphic sources can be displayed simultaneously on the display wall. All analog and digital Video-/RGB-/DVI- and IP Streaming data is transmitted with 1GByte/s without any dependencies on the system.

## SYSTEM OVERVIEW



# ) NPX 3000



## Network-based Graphics Controller

### ) SYSTEM ARCHITECTURE

The new NPX Controllers from the 3x00 Series are based on the new Intel® XEON® Quad Core Technology CPUs. This new CPU generation provides better performance for the display of high-end visualisation applications compared to other systems.

- QUAD CORE Intel Xeon Processor with up to 2.5 GHz (8 cores)
- High-end server components for highest availability
- PCI-X 64bit/100MHz bus with 800MB/s
- 2GB EEC RAM
- DUAL Gigabit Ethernet



### ) SYSTEM AVAILABILITY

- Redundant power supply units, hot swappable
- New AirFlow technology with 6 hot swappable fans
- Redundant SATA hard disc drives with RAID1, hot swappable
- Disk Imaging and Disaster Recovery, in the event of a system or disk crash, security attack or other fatal failure you can restore your entire controller within minutes - no reinstallation is required
- The NPX 3000 is built in accordance with eyevis ISO 9001 registered facility to meet the specific requirements of each customer and is the best controller for standard control rooms with high availability.



### ) DESKTOP MANAGEMENT & OPERATING SYSTEM

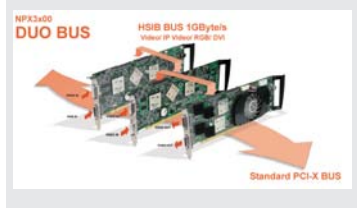
Thanks to its MultiScreen-ability, any data and application signals can be displayed simultaneously; they can also be positioned and resized freely. The operator has a big desktop with a very high resolution at his disposal, which will be multiplied by the size of the wall.

- Windows® XP PRO 32/64 BIT and WIN2003 Server support
- Up to 32GB RAM inside the systems reserved for RAM intensive applications
- Huge Windows desktop with up to 32000x32000 pixel depending on the size of the system
- Standard Windows® & X11 applications and SCADA software can be displayed on the wall without any restrictions
- Windows®-based applications can be displayed simultaneously with any other input signals like video and RGB/DVI.



### ) DUO BUS SYSTEM

Other systems are using the PCI Bus to transmit their input signals together with the standard system Bus. This solution has limitation because all the data is transmitted over on BUS and not so much bandwidth remains available. The eyevis NPX3000 controller uses a unique independent DUO-Bus system. A fast PCI-X Bus with 800MB/s for transmitting the Windows® and network information and a HSIB (High Interconnection Speed Bus) with 1GByte/s to transfer the video, digital streams and graphic signals to each output cards. This results in a fully separated BUS technology without dependence on the standard PCI-X Bus and reserves enough bandwidth.



# ) NPX 3000



## Network-based Graphics Controller

### ) INPUT SIGNAL PROCESSING



The NPX3000 controller can be equipped with various input cards for video and graphic integration.

Analog/digital video and RGB windows can be moved, scaled and placed freely on the display wall.

- The input cards provide state-of-the-art video processing resulting in superb quality
- Easy to upgrade for future system expansion

#### **Analog Video Inputs**

- Up to 16 video signals in one system
- Up to 16 video windows can be displayed with every display output
- Composite BNC or S-Video (Y/C)

#### **RGB Inputs**

- Display of the source output in a freely moveable, scalable and placeable window on the display wall
- Up to 8 RGB input sources
- Supports input resolutions up to 1280 x 1024 pixels

### ) OUTPUT GRAPHICS PROCESSING



The new 512-Bit GPU with 256-bit DDR memory-interface and 64MB per output channel achieves a never seen graphic performance.

- Analog and digital outputs up to 1400 x 1050 pixels
- Configurations up to 16 Output channels possible
- Multiple resolution modes for different output resolutions at the same time, with none rectangle adjustment
- Live preview support for each source inside the eyecon wall management software system
- Underlapping mode for narrow bezel displays
- Overlapping mode for edge overlapping projections
- Pivot mode for landscape and portrait display and display output cloning

### ) WALL MANAGEMENT SOFTWARE



For an easy management of large screen displays, we recommend to combine the eyecon wall management software with the NPX 3000 controller. With this software, especially developed for large screen displays, the user has nearly unlimited possibilities for the management and operation of his display wall.

# ) NPX 3000



## Network-based Graphics Controller

### ) TECHNICAL SPECIFICATIONS

|                       |  |
|-----------------------|--|
| Processor:            | Supports up to two Intel® 64-bit XEON® processors<br>Quad-Core Intel® Xeon® Processor E5420 with 2.5 GHz (optional up to 8 cores)                        |
| Chipset:              | Intel® 5000P (Blackford) chipset   |
| RAM:                  | 2GB EEC RAM (Expandable up to 32GB)  |
| Expansion slots:      | 6 x 64-bit/PCI-X   |
| NPX-Bus:              | Independent 1 GByte Bus (Point to Point) for the transfer of video and graphic signals   |
| Harddisc:             | SATA 3.0Gbps, HotSwap removable 74GB, SATA 10.000upm<br>(Optional: 74 GB, RAID1 HotSwap, optionally expandable up to 1 TB)                               |
| Disc storage:         | DVD Recorder with Image and Recovery Software  |
| Ethernet:             | 2 x Standard integrated 10/100/1000 Mbps RJ45 ports  |
| Power supply:         | 100-240 V, 50-60Hz, 650 Watt, Optional: Redundant, HotSwap 760Watt   |
| Accessories:          | 104-key keyboard; mouse with 2-buttons + wheel/button, optional: extension up to 50m; DVI cables for eyevis Cubes (Fibre optic) for distances up to 100m |
| Dimensions (HxWxD):   | 17.7 cm x 42.35 cm x 67.0 cm   |
| Weight:               | 26.5 kg  |
| Operating conditions: | Temperature: 0°C – 40°C (32°F – 104°F)<br>Humidity: 10 – 90% non-condensing<br>Altitude: Up to 3,048.0m (10,000 feet)                                    |
| Operating System:     | Windows® XP PRO 32/64Bit Edition, Win2003 Server 32/64Bit  |

#### NPX Graphic Card NPX3000 - Out 8/4

|                     |  |
|---------------------|--|
| Graphics memory:    | 512 / 256 MB SGRAM per graphics controller, 8 / 4 outputs per card         |
| Wall Configuration: | Any rectangular or non-rectangular array up to 16 display modules          |
| Resolution:         | 640 x 480 to 1400 x 1050 pixels per output                                 |
| Colour depth:       | 8/16/32 Bit  |
| GPU:                | 512Bit GPU   |
| Output signal:      | DVI-I connector (both analog and digital, DVI-I to HD15 adapters included) |

#### Video Input Card NPX3000 - V8

|                      |  |
|----------------------|--|
| Inputs:              | 8 x Composite or S-video BNC connectors  |
| Input format:        | NTSC, PAL, SECAM   |
| Decoder:             | High quality video decoder with adaptive comb-filter and de-interlacing  |
| Scaling and display: | Display of multiple video sources in any size, everywhere on the wall. Up to 16 video windows per display channel. Control of colour, brightness, contrast |

#### RGB Input Card NPX3000 - R4

|                      |   |
|----------------------|---|
| Inputs:              | 4 x HD15  |
| Processors:          | real-time RGB with full refresh; integrated quad scaler   |
| Format:              | RGB with any Sync type (Composite, separate H and V syncs)  |
| Resolutions:         | Up to 1280 x 1024 pixels  |
| Pixel format:        | Samples and displays at 16 or 24 bits per pixel   |
| Scaling and display: | Display of multiple sources up to any size, everywhere on the wall. Up to 4 RGB windows per display channel. Control of colour, brightness, contrast. |

#### Video/RGB Hybrid Input Card NPX3000 - HV8R4

|         |  |
|---------|--|
| Inputs: | The NPX3000–HV8R4 Card is a hybrid input card that provides 4 x RGB and 8 x Video inputs. The technical is identical with the specifications of the corresponding Video and cards. |
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