VIEWSPAN 6®



Application | VIEWSPAN 6° is designed for high efficiency, cost effective monitor wall installations

An industrial-grade, high performance video wall controller system for surveillance control rooms

VIEWSPAN® is a dedicated hardware platform with highly optimised video processing software that delivers enterprise-level performance at lower cost than PC-based systems



FULL HD



- Six HDMI/DisplayPort outputs for full HD monitors
- Decoding and display of 26 full HD streams at 30 FPS
- | Single display canvas across 6 screens
- Decoding of any video format, resolution and frame rate
- | Designed specifically for CCTV video wall display systems
- Active output drivers for long cable connections
- Accelerated fisheye camera display de-warping



VIEWSPAN 6® is a dedicated six-screen video wall display processor with high performance and reliability

VIEWSPAN's DisplayPort outputs drive up to six full HD monitor screens with a simple and straightforward setup process.



Configuration and Control via web browser interface

Display Controllers

The VIEWSPAN® range of video wall controllers are designed especially for video surveillance applications.

They are built on dedicated hardware platforms which meet the performance and reliability requirements of high security control rooms.

VIEWSPAN 6 is a 2U, rackmounted unit, with six active DisplayPort outputs for extended cable lengths up to 20m. Each output will drive an HD monitor at full resolution (1920 x 1080).

Compared to PC-based systems, VIEWSPAN appliances provide extended lifetime, durability, much higher performance and lower power consumption - all at a similar cost.

Optimised Software

The VIEWSPAN system includes highly optimised video processing software which, when combined with the powerful dedicated GPU and CPU hardware, produces incredible performance with super-smooth video, decoding up to 26 full HD channels at 30 FPS across the 6 display outputs.

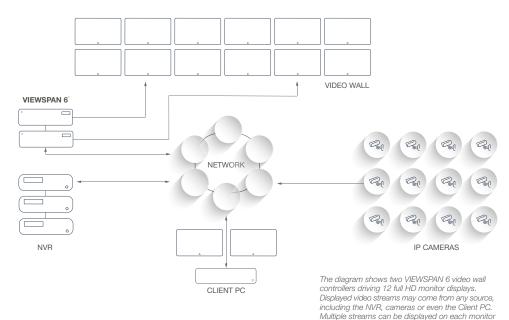
See the table opposite for full decode performance at various stream resolutions. Even higher performance is available with VIEWSPAN 6 Plus.

Setup and Configuration

A simple web-browser interface is used to configure all VIEWSPAN systems, allowing network setup, display arrangement and VMS/NVR integration settings. VIEWSPAN can be directly integrated with the VMS or integrated security management system, or it can be used as an accelerator platform for the VMS display, controlling VIEWSPANs on a client through the browser interface.

Multiple VIEWSPAN units can be configured to control large video walls with many monitors for large CCTV control rooms and security operations centres.

VIEWSPAN 6® APPLICATION DIAGRAM





Active output DisplayPort drivers enable monitor cable lengths of up to 20 metres

Panoramic fisheye camera lens de-warping is performed on the GPU for optimum performance.



saved and selected under operator control or triggered by alarms.

Video Stream Decoding

VIEWSPAN® devices can decode almost any video stream format, with the most common being H.264 and H.265 for surveillance applications, at any resolution and frame rate. A higher number of streams can be decoded and displayed simultaneously if the resolution and/ or frame rate is lower. For live video display applications, it is preferable to maintain a high frame rate (25 or 30 FPS) for smooth video.

Optimised Resolution for Display

Typical display monitors will be full HD resolution. When multiple video streams are downscaled and

displayed on a monitor (with 4-way and 9-way matrices being most common), then the input video stream resolution can be reduced accordingly without reduction of display image quality.

Nearly all modern IP cameras can provide simultaneous high resolution primary streams for recording and lower resolution sub-streams for display, transmission, remote live viewing and other purposes.

VIEWSPAN can take advantage of these sub-streams to display many more channels of smooth live video as shown in the table below.

VIEWSPAN® Range

Veracity provides a range of VIEWSPAN systems to suit different requirements. VIEWSPAN 6 Plus is a higher performance unit, decoding up to 48 full HD streams at 30 FPS to six full HD displays. The VIEWSPAN 6 Plus model can also drive six 4K displays at full resolution. VIEWSPAN Solo is a very compact, low-cost, single or dual full HD output unit able to decode up to 25 full HD streams. Its small size and low power makes VIEWSPAN Solo ideal for remote or local auxiliary monitor displays. All VIEWSPAN models are inter compatible and are managed through a simple browser interface.

VIEWSPAN 6°, VIEWSPAN 6 Plus® and VIEWSPAN Solo® Performance Table

PERFORMANCE TABLE		MAXIMUM NUMBER OF SIMULTANEOUS DECODE CHANNELS AT 30 FPS		
IP VIDEO INPUT (RESOLUTION)	IP VIDEO INPUT (REFERENCE)	VIEWSPAN 6®	VIEWSPAN 6 Plus®	VIEWSPAN Solo®
720 x 480 or 576	NTSC or PAL D1	48 ch	72 ch	48 ch
1280 x 720	720p HD	36 ch	54 ch	36 ch
1920 x 1080	1080p Full HD	26 ch	48 ch	25 ch
3480 x 2160	4K UHD	6 ch	6 ch	6 ch
Display Outputs, Type & Resolution		6 x DisplayPort HD	6 x DisplayPort HD or 4K	1 x HDMI HD or 4K or 1 x HDMI HD + 1 x VGA HD

The table shows the number of video input channels which can be simultaneously decoded at a given input resolution. However, the displayed resolution of each individual channel will be dictated by the

display monitor resolution, layout pattern and number of screens available. For example, VIEWSPAN 6 can decode 26 Full HD input channels but has 6 Full HD display outputs.

Therefore at least some of the input channels will be scaled down to fit the screen area resolution defined for those channels

TECHNICAL SPECIFICATION

VIEWSPAN 6®

POWER INPUT

Input Voltage
Power Consumption

100V to 240V AC, 50/60Hz 180W typical, 250W under full load

SYSTEM

Hardware Dedicated mainboard with industrial CPU module & GPU module

Processors CPU: Intel; GPU: Nvidia Operating System Windows 10 Pro, 64bit

OS on 2.5" SSD, 8GB DDR RAM

Codec Support GPU: H.264, H.265, MPEG2, MJPEG, VC8

CPU: All ffmpeg codecs – see www.ffmpeg.org/general.html#Video-Codecs

PERFORMANCE

Decode Channels All at 30 FPS (higher channel counts available with lower frame rates)

48 at D1 resolution (48 channels across 6 full HD screens)
36 at 720p resolution (36 channels across 6 full HD screens)
26 at full HD resolution (26 channels across 6 full HD screens)
6 at 4K UHD resolution (6 channels across 6 full HD screens)

Stretch Video Yes, across up to six screens

De-warp Yes

NETWORK

Ethernet 2 x Gigabit Ethernet interfaces

CONNECTIONS

Power IEC 13 Ethernet 2 x RJ45

USB 2 x USB 2.0 A connections
Display 6 x DisplayPort 1.2

PHYSICAL/ENVIRONMENTAL

Form Factor 2U Rackmount case

Case Dimensions W 482mm x H 88mm x D 220mm [19.00" x 3.46" x 8.66"]

Weight 3Kg [6.61lbs]

Operating Temperature $0^{\circ}\text{C to } +40^{\circ}\text{C } [32^{\circ}\text{F to } +104^{\circ}\text{F}]$ Storage Temperature $-40^{\circ}\text{C to } +80^{\circ}\text{C } [-40^{\circ}\text{F to } +176^{\circ}\text{F}]$

Relative Humidity 85% non-condensing

Safety & Compliance CE, FCC Class A, UKCA, ROHS and WEEE

PRODUCT CODES

VSPAN-6-UK VSPAN-6-EU VSPAN-6-US

VSPAN-6-PLUS-UK VSPAN-6-PLUS-EU

VSPAN-6-PLUS-US VSPAN-SOLO-UK VSPAN-SOLO-EU VSPAN-SOLO-US VIEWSPAN 6 video wall controller, 6 outputs & UK power cable VIEWSPAN 6 video wall controller, 6 outputs & EU power cable VIEWSPAN 6 video wall controller, 6 outputs & US power cable

VIEWSPAN 6 Plus video wall controller, 6 outputs & UK power cable VIEWSPAN 6 Plus video wall controller, 6 outputs & EU power cable VIEWSPAN 6 Plus video wall controller, 6 outputs & US power cable VIEWSPAN Solo video wall controller, 1 or 2 outputs & UK PSU VIEWSPAN Solo video wall controller, 1 or 2 outputs & EU PSU VIEWSPAN Solo video wall controller, 1 or 2 outputs & US PSU





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