6 CH 4K VIDEO WALL CONTROLLER

VIEWSPAN **6** Plus®

4K **UHD**

Application | **VIEW**SPAN 6 Plus® is designed for high resolution, video wall installations

A very high performance video wall controller system for six 4K or HD screens

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

| Six HDMI/DisplayPort outputs for HD or 4K monitors

| Decoding and display of 48 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

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VIEWSPAN 6 Plus® is a powerful, modular, video display controller for large-scale, high resolution video wall display installations

Multiple VIEWSPAN® devices can be integrated to drive large numbers of monitor screen displays.

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 Plus® is a 2U, rackmounted unit, with six active DisplayPort outputs for extended cable lengths up to 20 metres. Each output will drive a UHD monitor at full resolution (3840 x 2160).

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 48 full HD channels at 30 FPS across the 6 display outputs.
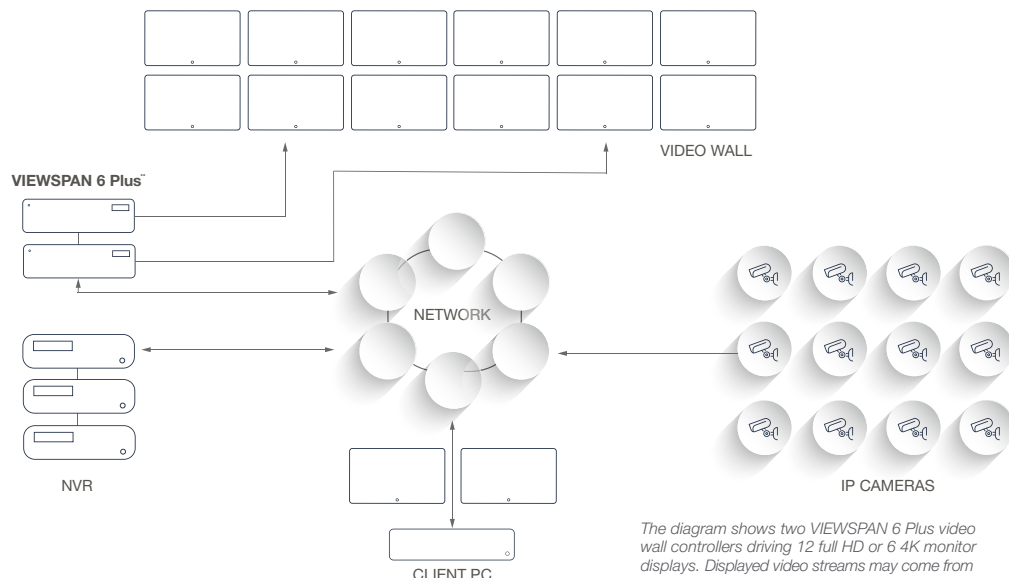
VIEWSPAN includes GPU-accelerated fish-eye camera lens de-warping capability, for corrected display of live or recorded video. See table for full decode performance at various stream resolutions.

Setup & 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 Plus® APPLICATION DIAGRAM

VIDEO WALL

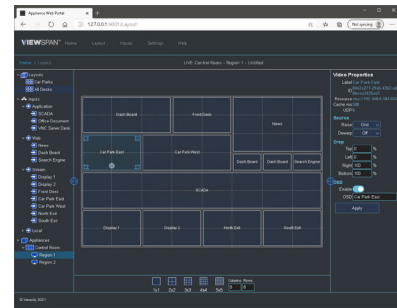VIEWSPAN 6 Plus™

NETWORK

NVR

CLIENT PC

IP CAMERAS

The diagram shows two VIEWSPAN 6 Plus video wall controllers driving 12 full HD or 6 4K monitor displays. Displayed video streams may come from any source, including the NVR, cameras or even the Client PC. Multiple streams can be displayed on each monitor (matrix view).

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

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

Multiple display monitor layouts can be defined, 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.

If 4K screens are used, however, up to four full HD video streams can be shown per screen without any loss of video quality. 6 Plus can also display 4K camera streams at full resolution.

VIEWSPAN can take advantage of lower resolution sub-streams to display more images, e.g. up to nine 720p HD sreams per screen. See the table below for full information.

VIEWSPAN® Range

Veracity provides a range of VIEWSPAN systems to suit different requirements. VIEWSPAN 6 is a lower cost unit, decoding up to 26 full HD streams at 30 FPS to six full HD displays. The VIEWSPAN 6 Plus model drives six 4K displays at full resolution and can decode 48 full HD streams. 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.

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TECHNICAL **SPECIFICATION**

VIEWSPAN **6** Plus®

POWER INPUT	
Input Voltage	100V to 240V AC, 50/60Hz
Power Consumption	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)
	72 at D1 resolution (48 channels across 6 full HD screens)
	54 at 720p resolution (36 channels across 6 full HD screens)
	48 at full HD resolution (26 channels across 6 full HD screens)
	6 at 4K UHD resolution (6 channels across 6 4K 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°C to +40°C [32°F to +104°F]
Storage Temperature	-40°C to +80°C [-40°F to +176°F]
Relative Humidity	85% non-condensing
Safety & Compliance	CE, FCC Class A, UKCA, ROHS and WEEE

PRODUCT CODES	
VSPAN-6-UK	VIEWSPAN 6 video wall controller, 6 outputs & UK power cable
VSPAN-6-EU	VIEWSPAN 6 video wall controller, 6 outputs & EU power cable
VSPAN-6-US	VIEWSPAN 6 video wall controller, 6 outputs & US power cable
VSPAN-6-PLUS-UK	**VIEWSPAN 6 Plus video wall controller, 6 outputs & UK power cable**
VSPAN-6-PLUS-EU	**VIEWSPAN 6 Plus video wall controller, 6 outputs & EU power cable**
VSPAN-6-PLUS-US	**VIEWSPAN 6 Plus video wall controller, 6 outputs & US power cable**
VSPAN-SOLO-UK	VIEWSPAN Solo video wall controller, 1 or 2 outputs & UK PSU
VSPAN-SOLO-EU	VIEWSPAN Solo video wall controller, 1 or 2 outputs & EU PSU
VSPAN-SOLO-US	VIEWSPAN Solo video wall controller, 1 or 2 outputs & US PSU

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