DATASHEET

VIDEO DISPLAY CONTROLLER

VIEWSPAN Solo®

Application | **VIEW**SPAN Solo® is designed for auxiliary video matrix displays used in a variety of applications

An industrial-grade, high performance video display controller for supplementary displays

VIEWSPAN Solo® is a video display controller for single Full HD or UHD screens, designed to display a wide range of video, graphics, digital signage, AV and data sources

- Single screen Full HD or UHD/4K display output
- Decoding and display of 25 Full HD streams at 30 FPS
- Designed for spot monitor or auxiliary display applications
- Display of IP cameras, AV sources, web pages, signage and text
- Independent of VMS, but supports multiple integrations
- Browser-based integrated management of multiple systems
- Low power consumption (25W typical)

veracity

VIEWSPAN Solo® is a compact, yet powerful, industrial-grade video display processor for multiple networked data sources

VIEWSPAN Solo® is an ideal networked display system for auxiliary monitors, spot monitors, retail displays, reception desks and manager's offices

Configuration and Control via web browser interface

Display Controllers

The VIEWSPAN® range of video display controllers are designed for a wide range of display and AV applications. They are built on dedicated hardware platforms which meet the performance and reliability requirements of video surveillance, security and AV applications.

VIEWSPAN Solo® is a compact unit, with a single HDMI output for a Full HD or 4K monitor. An additional VGA output may be used to drive a second Full HD monitor if required.

Optimised Software

The VIEWSPAN system incorporates highly optimised VIEWSPAN NE**X**US® video processing software. Combined with VIEWSPAN Solo hardware, NE**X**US produces super-smooth video, decoding up to 25 Full HD channels at 30 FPS across single or dual display outputs. See the table opposite for full decode performance at various stream resolutions. The larger rackmounted VIEWSPAN variants offer higher performance and multiple display outputs per unit.

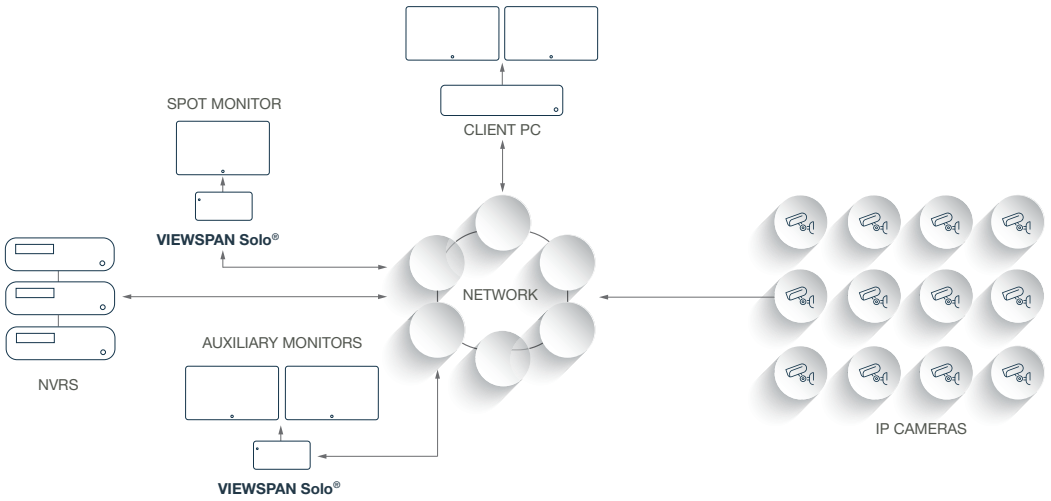
Setup and Configuration

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 can be used as an accelerator platform for the VMS display, controlling VIEWSPANs on a client through the browser interface.

Matrix View and Layout Patterns

VIEWSPAN Solo can be configured to match the physical monitor layout, e.g. a single screen, side-by-side dual screen, or stacked dual screen. However, use of a single Full HD screen via HDMI is recommended. The layout becomes a single canvas for displaying video. Regions are defined within this canvas and may be a fraction of a screen or spread across the full canvas. Each region can have

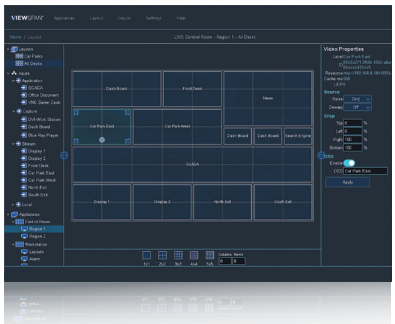
VIEWSPAN Solo® APPLICATION DIAGRAM



The diagram shows a VIEWSPAN Solo driving a spot monitor at an operator workstation and another VIEWSPAN Solo driving a pair of auxiliary monitors elsewhere on the network (e.g. reception desk). 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).

VIEWSPAN Solo® can simultaneously decode and display up to 25 Full HD video streams at 30FPS

Panoramic fisheye camera lens dewarping is performed on the GPU for optimum performance



Multiple display monitor layouts can be defined, saved and selected under operator control or triggered by alarms.

pre-defined matrix layouts. The layouts can be selected manually or automatically via time schedules or triggered via networked 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.

High Resolution Display

Typically, display monitors will be Full HD resolution, although VIEWSPAN Solo is also capable of driving a UHD/4K monitor if required.

Input Sources

All VIEWSPAN systems can display video, graphics and data from many sources. These include AV (audio-visual) sources, IP cameras, NVR video playback, web pages, application screen capture (see VIEWCAST), encoders, digital signage, scrolling text, time and date.

All of these sources can be decoded, scaled and displayed anywhere on the display canvas.

VIEWSPAN® Range

A range of VIEWSPAN models suit different applications. All models run on the VIEWSPAN NEXUS software platform, (available as a software-only licence). VIEWSPAN Plus 6, 9 and 12 screen models offer up to nine Full HD decodes per screen, with higher densities in the VIEWSPAN Pro range.

VIEWSPAN AV can be specified to suit customer requirements including multiple direct AV capture inputs. VIEWCAST® is a screen capture software utility which generates VIEWSPAN® video streams from desktops or applications on Windows PCs.

VIEWSPAN Solo®, VIEWSPAN Plus® and VIEWSPAN Pro® Performance Table

PERFORMANCE TABLE		MAXIMUM NUMBER OF SIMULTANEOUS DECODE CHANNELS AT 30 FPS		
IP VIDEO INPUT (RESOLUTION)	**IP VIDEO INPUT (REFERENCE)**	**VIEWSPAN Solo®**	**VIEWSPAN Plus® Series 6, 9, or 12 Outputs**	**VIEWSPAN Pro® Series 6 or 9 Outputs**
720 x 480 or 576	NTSC or PAL D1	48 ch	84 ch, 120 ch, 120 ch	9 ch, 120 ch
1280 x 720	720p HD	36 ch	72 ch, 108 ch, 120 ch	88 ch, 120 ch
1920 x 1080	1080p Full HD	25 ch	54 ch, 81 ch, 108 ch	72 ch, 108 ch
3840 x 2160	4K UHD	6 ch	6 ch, 9 ch, 12 ch	20 ch, 30 ch
Display Outputs, Type & Resolution		1 x HDMI (FHD or UHD) or 1 x HDMI (FHD) + 1 x VGA (FHD)	6, 9 or 12 x mini DisplayPort (FHD or UHD)	6 or 9 x DisplayPort (FHD or UHD)

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 screen resolution, layout pattern and number of screens available.

TECHNICAL **SPECIFICATION**

VIEWSPAN Solo®

POWER INPUT	
Input Voltage	12V DC input, (100V/240V AC, 50/60Hz to 12V DC power supply included)
Power Consumption	25W typical, 60W maximum
SYSTEM	
Hardware	Industrial mini PC board with high performance Intel CPU & GPU OS on mSATA SSD, 4GB DDR RAM
Processors	CPU: Intel; GPU: Intel
Operating System	Windows 10 LTSC, 64bit
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 ch at D1 incoming resolution 36 ch at 720p incoming resolution 25 ch at Full HD incoming resolution 6 ch at 4K incoming resolution
Stretch Video	Yes, (using both HDMI and VGA display outputs)
Dewarp	Yes
NETWORK	
Ethernet	1 x Gigabit Ethernet interface
CONNECTIONS	
Power	DC jack
Ethernet	1 x RJ45
USB	2 x USB 2.0, 4 x USB 3.0
Display	1 x HDMI 2.0, 1 x VGA
PHYSICAL / ENVIRONMENTAL	
Form Factor	Mini PC
Case Dimensions	W 129mm x H 40mm x D 129mm [5.08” x 1.57” x 5.08”]
Weight	628g
Operating Temperature	0°C to +40°C [32°F to +104°F]
Storage Temperature	-20°C to +60°C [-4°F to +140°F]
Relative Humidity	85% non-condensing
Safety & Compliance	CE, FCC Class A, BIS, ROHS and WEEE, UKCA,
PRODUCT CODES	
VSPAN-SOLO-UK	**VIEWSPAN Solo video display controller, 1 or 2 outputs & UK power cable**
VSPAN-SOLO-EU	**VIEWSPAN Solo video display controller, 1 or 2 outputs & EU power cable**
VSPAN-SOLO-US	**VIEWSPAN Solo video display controller, 1 or 2 outputs & US power cable**

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