VIDEO DISPLAY CONTROLLER
# **VIEW**SPAN Solo®



Application | **VIEW**SPAN Solo® is designed for additional video matrix displays 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 or dual screens, with highly optimised video processing software delivering high performance in a compact format.

| Single or dual outputs for full HD monitors

| Decoding and display of 25 full HD streams at 30 FPS

| Single Windows 10 desktop canvas

| Decoding of any video format, resolution and frame rate

| Designed for spot monitor or additional display applications

| Low power consumption (25W typical)

| Compact format with Vesa mount

veracity

# **VIEW**SPAN Solo® is a compact, yet powerful, industrial-grade video display processor for video surveillance

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 especially for video surveillance applications. They are built on dedicated hardware platforms which meet the performance and reliability requirements of video surveillance security 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 simultaneously to drive a second full HD monitor.

## Optimised Software

The VIEWSPAN system includes highly optimised video processing software

which, when combined with the specific VIEWSPAN Solo hardware, 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 6® variants offer higher performance & 6 display outputs per unit.
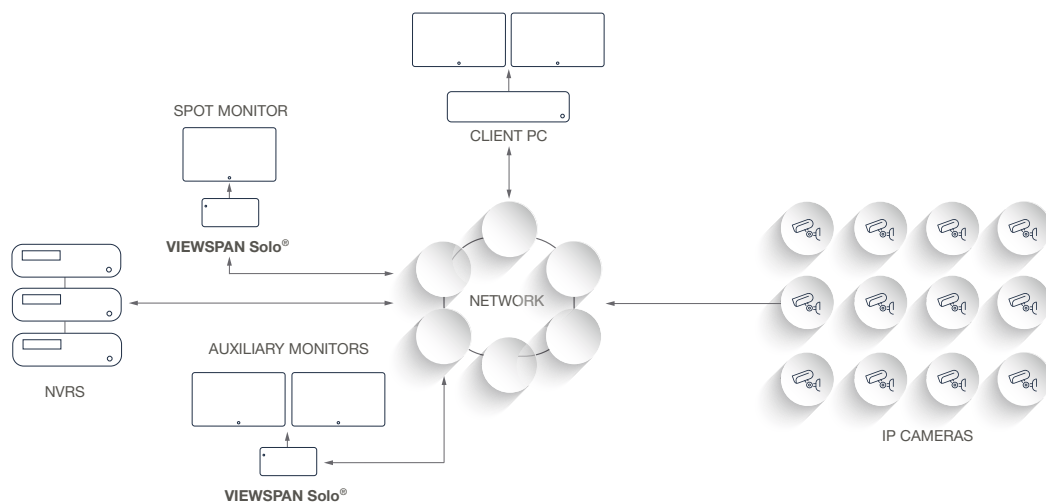
## Setup and Configuration

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

The VIEWSPAN Solo display output(s) can be configured to match the physical monitor layout e.g. a single screen, side-by-side dual screen, or stacked dual screen. Once set, 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 both screens. Each region can have custom pre-defined matrix layouts

SPOT MONITOR

CLIENT PC

**VIEWSPAN Solo**®

NVRS

AUXILIARY MONITORS
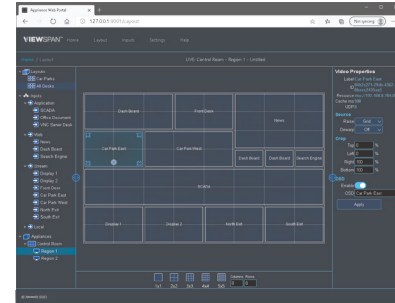
NETWORK

IP CAMERAS

**VIEWSPAN Solo**®

The diagram shows a VIEWSPAN Solo driving an additional 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).

veracity

# VIEWSPAN Solo® can drive up to two full HD monitor displays, decoding 25 full HD streams

Panoramic fisheye camera lens de-warping 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.*

which may be selected manually or automatically. Specific layouts may be trigged via alarms sent to the unit. As many layouts as required may be configured.

## 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, although VIEWSPAN Solo is capable of driving a 4K monitor if required. When multiple video channels are being displayed on an HD 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 Solo can take advantage

of these sub-streams to display more channels of smooth live video – see performance reference table below.

## VIEWSPAN ® Range

Veracity provides a range of VIEWSPAN systems to suit different requirements. In addition to the VIEWSPAN Solo described in this datasheet, VIEWSPAN 6 Plus is a rackmount unit offering 6 full HD display outputs and greater flexibility.

VIEWSPAN 6 Plus is a higher performance unit, decoding up to 48 full HD streams at 30 FPS. The 6 Plus model can also drive six 4K displays at full resolution.

## 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.*

# TECHNICAL **SPECIFICATION**

## VIEW SPAN 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 CPU & GPU<br>OS on mSATA SSD, 4GB DDR RAM |
| Processors | CPU: Intel; GPU: Intel |
| Operating System | Windows 10 Pro, 64bit |
| Codec Support | GPU: H.264, H.265, MPEG2, MJPEG, VC8<br>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)<br>48 at D1 resolution (48 channels across 2 full HD screens)<br>36 at 720p resolution (36 channels across 2 full HD screens)<br>25 at Full HD resolution (25 channels across 2 full HD screens)<br>6 at 4K UHD resolution (6 channels across a single 4K screen) |
| Stretch Video | Yes, across two screens |
| De-warp | 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, ROHS and WEEE, UKCA |

### PRODUCT CODES

| | |
|---|---|
| **VSPAN-SOLO-UK** | **VIEWSPAN Solo video wall controller, 1 or 2 outputs & UK power cable** |
| **VSPAN-SOLO-EU** | **VIEWSPAN Solo video wall controller, 1 or 2 outputs & EU power cable** |
| **VSPAN-SOLO-US** | **VIEWSPAN Solo video wall controller, 1 or 2 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 |

veracity

Veracity HQ
Prestwick International Aerospace Park
4 Dow Road
Prestwick
UK
KA9 2TU
Tel +44 (0) 1292 264967
www.veracityglobal.com
sales@veracityglobal.com

*See www.veracityglobal.com website
for country and region specific contacts.*