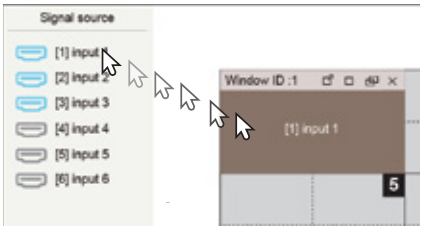
NEXIS

DRAG & DROP CROSS MULTI-VIEW VIDEO WALL & MATRIX SWITCH

The NEXIS VW8/VW9 Series is the FPGA pure hardware architecture video wall controller through modular I/O boards design in a single chassis with a full range of hot-swappable I/O Interface boards. The solution offers real-time control and advanced access to manage 8/16/36/72/144 sources and displays. Suitable for broadcasting stations, traffic and control rooms, transportation-related, emergency service centers, and any application that requires customizable, high-speed A/V signal routing

Pure hardware architecture

FPGA pure hardware architecture is adopted to avoid virus intrusion or equipment, reduce boot time and improve system stablility.

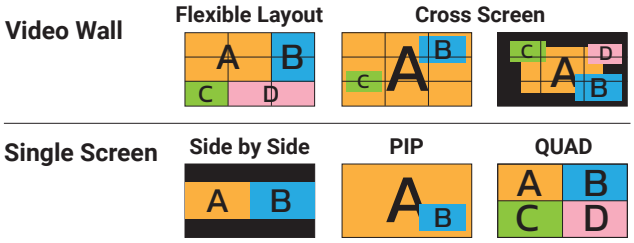


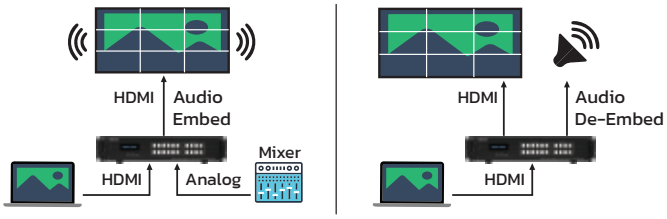
Drag & Drop

Seamless switch just drag & drop video source to switch the video signal. You can resize window by mouse (PC software)

Modular Design

Support IN/OUT up to 8x8, 16x16, 36x36, 72x72, 144x144 according to requirement. I/O board & PSU suppot hot swap





Advance Display Layout

Support video signal splicing, scaling, overlapping and roaming over video wall. You can adjust window size and move to any position on the video wall. Each display support 2/4* sources

* VW8802Q Output card only

No Extra Cost for Audio Embed / De-Embed**

You can insert analog audio each channel to HDMI input card and embed to HDMI output. And you can extract analog audio from HDMI signal to external audio system. (all channel can be muted separately)

** Some input/output card only (see I/O card detail)

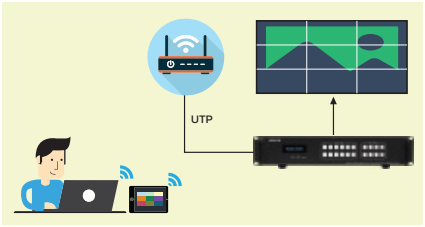
Multi-Format video interface

You can mixed different video interface input/output card install to chassis such as 4K HDMI, DVI, VGA, HDBaseT, SDI and Fiber optic

Redundant PSU* support

Main chassis 7U, 12U and 24U support redundant power supply and hot swap.

* Backup Power supply (Optional)



Multiple Control Method

You can control via PC software, Front panel button and Web GUI on PC & Mobile devices such as Android Tablet/iPad

GENERAL FEATURES For VW8/VW9 Series

- FPGA hardware architecture
- Modular design support up to 8 In/8 Out (2U Rack), 16 In/16 Out (3U Rack), 36 In/36 Out (7U Rack), 72 In/72 Out (12U Rack), 144 In/144 Out (24U Rack)
- Seamless Video Wall & matrix switching
- Output synchronization - Matrix switch & splicing function can support strictly synchronization
- Support resolution up to 4K30 In/Out*
- Support DVI 1.0 protocol & compatible with HDCP 1.3/HDMI 1.3a/1.4a*
- 5 group of Video Wall support
- Resolution in each video wall group can be different
- Save / Recall Profiles support
- Support all 2K and 4K cards to upscale/down scale seamless matrix switching
- OSD character (TEXT) on Input signal support
- Video/Audio synchronized switching & auto delay
- PC Software control via Ethernet, RS232/485
- Multi-User support via PC Software
- 3rd party Central controller support via RS232/485
- Intelligent fan cooling management
- Output BG color when no input signal
- Support EDID read & management
- Firmware upgradable

* Depend on I/O Card

HIGHLIGHT FEATURES For VW9 Series

Dual Control cards, one master & one backup

Optional dual control cards, one main and one standby, ensure the stable operation of the system.

* Support only 7U, 12U, 24U Chassis

Video wall rolling subtitles

Support full-screen scrolling subtitles on video wall, support monochrome bitmap, color can be modified, scrolling can be set

Visual operation of multi-terminal

Signal visualization preview. In any system, on any PC/mobile phone/tablet. It can realize visualization, movement, touch management, and multiple operation terminals can be controled and synchronized at the same time.

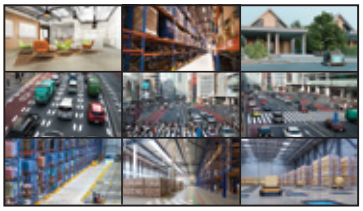
Any customized resolution setting for each output

Support sny customized resolution for each output channel to match irregular resolution of sending card to LED video wall and to apply the point to point display

Live Preview

You can see real-time preview all input sources and whole video wall via Web Based software and Software control

* Preview card optional require



IP Input card support split function

Supports up to 100 channels of IPC decoding on the wall, support for screen splitting, single port supports single screen, 4 screens, 9 screens, 16 screens, 25 screens

GENERAL FEATURES For VW9 Series

- Upload Image background on video wall support
- OSD character on input signal (Text/Images)
- System real-time clock display
- Support all function web control
- Hardware operation support 24/7
- Input source window can be crop of any position, size
- Output BG color when no input signal - BG color can be change
- monitoring alerts status of each module

Specification

Model	Chassis	Specifications	No. Of Input Cards	No. Of Output Cards	No. Of Control Cards	Power Supply Default - Backup	Power	Dimensions (mm.)
VW8208, VW9208	2U	Support up to 8 inputs & 8 outputs	2	2	1	1	18W	445x400x88
VW8316, VW9316	3U	Support up to 16 inputs & 16 outputs	4	4	1	1	18W	445x400x132
VW8736, VW9736	7U	Support up to 36 inputs & 36 outputs	9	9	2	1 - 3	30W	445x400x310
VW81272, VW91272	12U	Support up to 72 inputs & 72 outputs	18	18	2	1 - 3	30W	445x400x532
VW824144, VW924144	24U	Support up to 144 inputs & 144 outputs	36	36	2	2 - 6	70W	445x400x1043

Card	
Input Card	DVI, Dual-Link DVI 4K, HDMI, HDMI 4K, VGA, Component, SD-SDI, HD-SDI, 3G-SDI, Fiber, HDBaseT, HDBaseT 4K
Output Card	DVI, Dual-Link DVI 4K, HDMI, HDMI 4K, VGA, YPbPr, SD-SDI, HD-SDI, 3G-SDI, Fiber, HDBaseT, HDBaseT 4K

Control mode	
Network Control	1 RJ45 interface, 10/100M adaptive, support the management and configuration of the machine
Serial control	2 RS-232 can be connected to the central control, and support loop-out control matrix, screen and other 3rd party equipment
Front panel control	Support front panel LCD display and switch button control, can modify IP address and other parameters
Other control	IR infrared control (optional), KVM switch control, RS-485 remote, 4-inch touch screen control (optional), web visualization control (optional), HDBaseT remote serial port control (optional)

Image Processing	
Switch effect	4K fast and seamless switching, no black field, no flicker, no fragmentation, no static picture, single and multi-channel audio and video synchronization switching
Transmission bandwidth	10Gbps
Output resolution	Support 4KX2K HD resolution, can customize configuration resolution

Environmental parameters	
Working temperature	-10~+55º C
Working humidity	<90% Non-condensing

I/O & Control Board Module Specifications

INPUT Board **OUTPUT Board** **Control/Preview Board**

VW7804

HDMI

Protocol	HDMI1.3a, HDCP1.3, DVI1.0
Physical Connector	4 x HDMI Type A INPUT
Resolution	1920x1200@60Hz
Audio	HDMI/4 CH 3.5mm audio In/Out
Max. Data Rate	6.75Gbps (2.25Gbps per color)
EDID	Default & Reading function

VW7842

HDMI

Protocol	HDMI1.4a, HDCP1.3, DVI1.0
Physical Connector	2 x HDMI Type A INPUT
Resolution	4K@30Hz
Audio	HDMI/2 CH 3.5mm audio In/Out
Max. Data Rate	13.5Gbps (4.5Gbps per color)
EDID	Default & Reading function

VW7604

DVI

Protocol	DVI1.0
Physical Connector	4 x DVI-D INPUT
Resolution	1920x1200@60Hz
Audio	4 CH 3.5mm audio input
Bandwidth	6.75Gbps (2.25Gbps per color)
EDID	Default & Reading function

VW7514

HDBT

Standard	HDBaseT
Physical Connector	4 x RJ45 INPUT
Resolution	1920x1200@60Hz
RS232/IR	4 way 6 pin pheonix base
Max. Data Rate	6.75Gbps (2.25Gbps per color)
EDID	Default EDID

VW7104

VGA

Protocol	VGA
Physical Connector	4 x DB15 INPUT
Resolution	1920x1200@60Hz
Audio	4 CH 3.5mm audio input
Bandwidth	150MHz @ -3dB
Gain	0dB

VW7404

SDI

Protocol	HD-SDI, SD-SDI
Physical Connector	4 x BNC (IN & Loop out per CH)
Resolution	1920x1080@60Hz
Audio	SDI Embedded audio
Pixel Bandwidth	2.970Gb/s, 1.485Gb/s, 270Mb/s

VW7704-K

Fiber

Interface	4x LC double fiber Connector
Fiber type	Multi mode/Single mode (optional)
Resolution	PC : 1920x1200@60Hz HDTV : 1920x1080P60
Distance	<300m/2~20km. (Single mode)

VW7002

IP

Protocol	RTP, RTSP, TCP, UDP
Physical Connector	2 Input RJ45 INPUT (4 IP Cameras)
Resolution	1920x1200@60Hz
Compression	H.264
Network Bandwidth	100Mbps.
Max. Delay Time	100ms

VW8804

HDMI

Protocol	HDMI1.3a, HDCP1.3, DVI1.0
Physical Connector	4 x HDMI Type A OUTPUT
Resolution	1920x1200@60Hz
Audio	HDMI/4 CH 3.5mm Output
Max. Data Rate	6.75Gbps (2.25Gbps per color)
Max. Video Source	2 Video Source on each output

VW8842

HDMI

Protocol	HDMI1.4a, HDCP1.3, DVI1.0
Physical Connector	2 x HDMI Type A OUTPUT
Resolution	4K@30Hz
Audio	HDMI or 4 way 3.5mm input
Max. Data Rate	13.5Gbps (4.5Gbps per color)
Max. Video Source	2 Video Source on each output

VW8604

DVI

Protocol	DVI1.0
Physical Connector	4 x DVI-I OUTPUT
Resolution	1920x1200@60Hz
Audio	4 CH 3.5mm Output
Bandwidth	2.25Gbps all digital/350Mhz analog
Max. Video Source	2 Video Source on each output

VW8802Q

HDMI

Protocol	HDMI1.3a, HDCP1.3, DVI1.0
Physical Connector	2 x HDMI Type A OUTPUT
Resolution	1920x1200Hz
Audio	HDMI or 2 way 3.5mm input
Max. Data Rate	6.75Gbps (2.25Gbps per color)
Max. Video Source	4 Video Source on each output

VW8704-K

Fiber

Interface	4x LC double fiber Connector
Fiber type	Multi mode/Single mode (optional)
Resolution	PC : 1920x1200@60Hz HDTV : 1920x1080P60
Distance	<300m/2~20km. (Single mode)
Max. Video Source	2 Video Source on each output

VW8514

HDBT

Standard	HDbaseT
Physical Connector	4 x RJ45 OUTPUT
Resolution	1920x1200@60Hz
RS232/IR	4 way 6 pin pheonix base
Max. Data Rate	6.75Gbps (2.25Gbps per color)
Distance	100m (1600x1200@60)
Max. Video Source	2 Video Source on each output

I/O & Control Board Module Specifications

INPUT Board **OUTPUT Board** **Control/Preview Board**

VW-CTN04

Control board for VW8 Series

Function	Control Connection
Physical Connector	RJ45, 1x RS232 IN, 1x RS232 OUT, 4 pin pheonix for Keyboard, 1x USB

VW-CTN05

Control board for VW9 Series

Function	Control Connection
Physical Connector	RJ45, 1x RS232 IN, 1x RS232 OUT, 4 pin pheonix for Keyboard, 1x USB

VW-PVW

Preview board

Function	Preview Video output
Physical Connector	RJ45

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