



# ORVW Series

## Video Wall Controller

Powerful Video and Image Processing Device



# ORVW Series Video Wall Controller

ORVW Series video wall controller is new generation professional image processing product which is based on the development of multi-windows, ultra-high definition and visual display control technology. Compare to other video wall controller in the market, ORVW series has upgraded its system capacity and use 6.25G base exchange processing chip, so that there is a significant advantage on the processing speed and professional display control. Meanwhile, ORVW series controller supports multiple services, density of I/O interfaces and long term reliability. It is an all-in-one product which has 4K input and output processing, IP-Video Decoding, Monitoring control, Scene preset, Log management, User management and other advanced applications to meet a variety of professional system application requirements.



ORVW Series

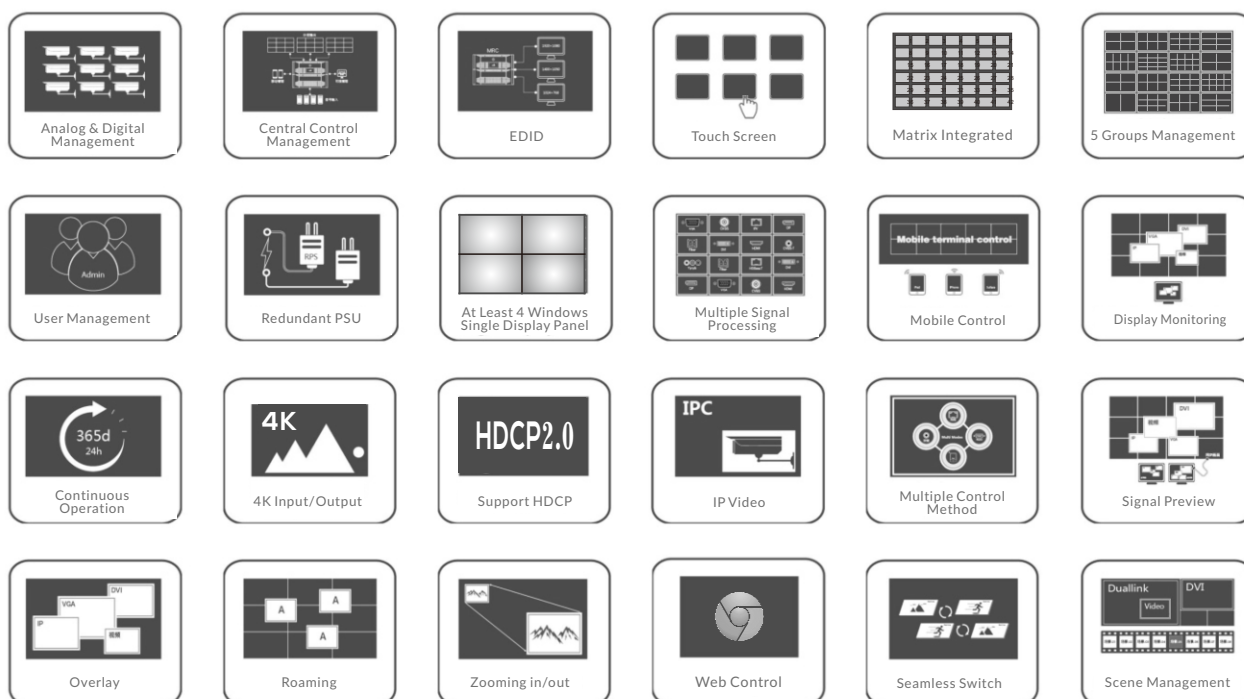
Video Wall Controller



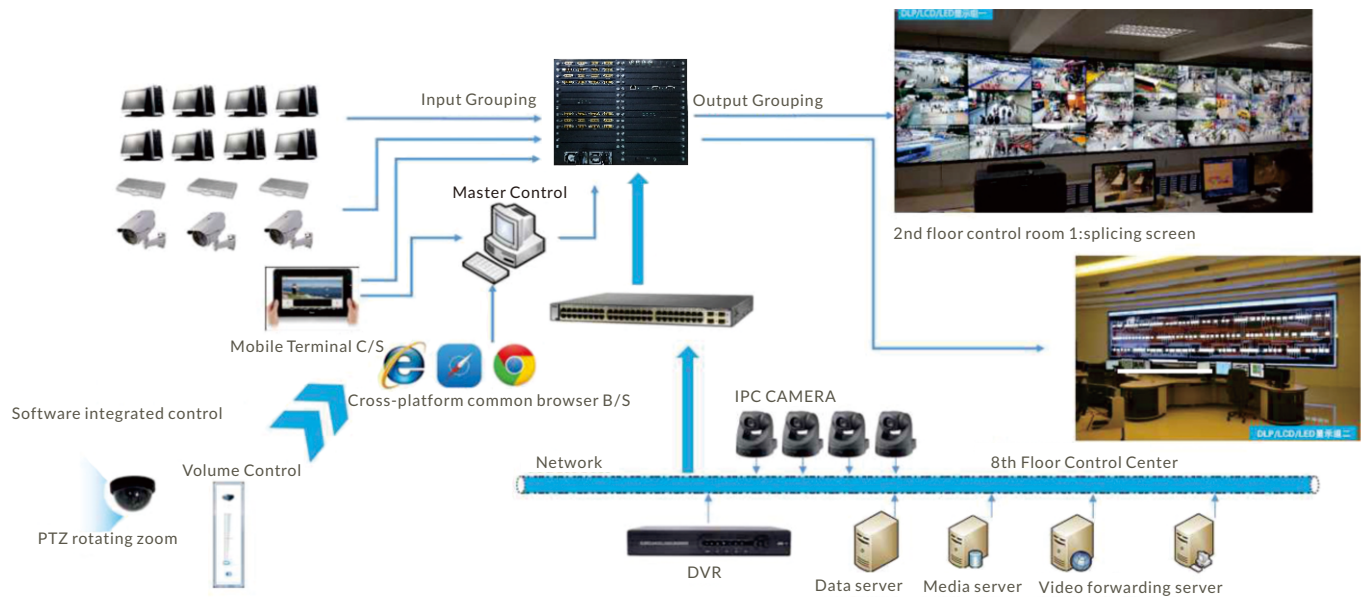
## FEATURES

- Pure-hardware FPGA Array, modular design, 6.25G/s base exchange processing speed;
- Support hot-swappable for I/O modules, control modules, redundant power supply. Easy to upgrade and maintenance;
- Support VGA, DVI, HDMI, CVBS, DP, SDI, HDBaseT, IP-Video, Fiber input sources and VGA, DVI, HDMI, SDI, CVBS, HDBaseT, Fiber output;
- Support 4K DP/HDMI/Dual-link DVI input and 4K HDMI output;
- Support VGA/DVI/HDMI sources self-adaption on single input card;
- Support HDCP2.0 for HDMI input and output;
- Support opening at least 8 windows on each two screens;
- Support up to 5 video wall groups control on single controller and work with variety of display terminals such as LCD, LED, DLP, projector;
- Support scene management, up to setup and display 255 scenes;
- Integrated with hybrid matrix function, output windows switching, friendly to system integrator;
- Support input source previewing and monitoring(refresh rate 24-30Hz);
- Variety of control methods such as RS232, Network, Touch screen/Keypad and compatible with third party control system;
- Support multi-user control management, software can be set through the operation authority, according to the authority level to develop different operating functions, different levels, different operating privileges, and can be set at any output authority range;
- B/S and C/S dual mode visualization control platform, support roaming, overlay, zoom in/out, multi-window switching, picture-in-picture, signal clip and a variety of display modes such as split screen, full screen and combination screen;
- Mobile visual management applications, support iPad, Surface;
- Support EDID, customize the output resolution according to the physical resolution of the display system;
- Advanced image decoding technology, compatible with a number of manufacturers' IPC signal and seamless access with variety resolutions such as 1080P, 720P, etc.

## RELEVANT FUNCTION INDICATION



## DIAGRAM

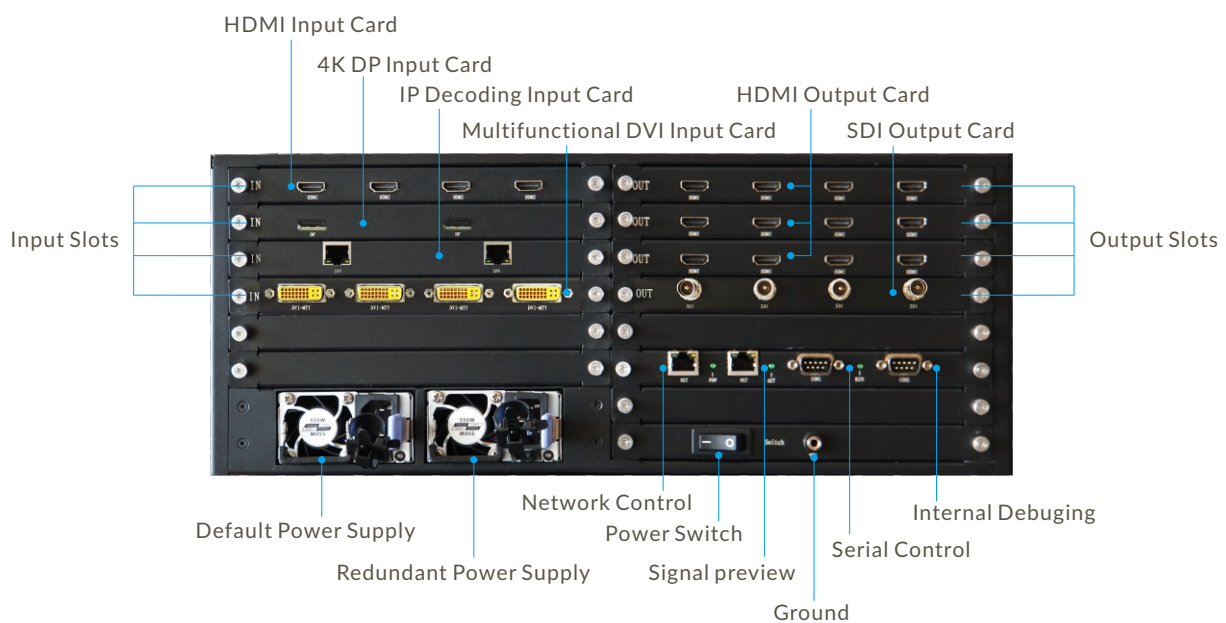


Input:VGA/DVI/HDMI/SDI/CVBS/Duallink-DVI/IP-Video/DP/HDBaseT/Fiber

Control:serial,network,third-party control system,ipad etc.

Output:DVI/HDMI/VGA/SDI/4K HDMI/HDBaseT/Fiber;

## PRODUCT STRUCTURE



## INPUT CARDS



Quad-Channel DVI Input Card



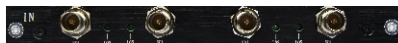
Quad-Channel VGA Input Card



Quad-Channel HDMI Input Card



Quad-Channel DP Input Card



Quad-Channel SDI Input Card



8-Channel CVBS Input Card



Dual-Channel 4K DP Input Card



Dual-Link DVI Input Card



Dual-Channel 4K HDMI Input Card



Quad-Channel HDBaseT Input Card



Quad-Channel Fiber Input Card



Dual-Channel IP Input Card

## OUTPUT CARDS



Quad-Channel DVI Output Card



Quad-Channel VGA Output Card



Quad-Channel HDMI Output Card



Quad-Channel SDI Output Card



Quad-Channel CVBS Output Card



Quad-Channel HDBaseT Output Card



Quad-Channel Fiber Output Card



Dual-Channel 4K HDMI Output Card

## CONTROL CARDS



Control Card A



Control Card B  
(With Signal Preview)

## REDUNDANT PSU



# SPECIFICATIONS

Device size	4U		8U		16U		16UA		16UB		24U		32U(Double)	
	Input	Output	Input	Output	Input	Output	Input	Output	Input	Output	Input	Output	Input	Output
Slots	4	4	9	8	20	20	29	15	15	29	40	40	80	80
Redundant PSU	1+1		1+1		2+2		2+2		2+2		2+2		8+8	

Product hardware information	System structure	Pure hardware FPGA architecture
	Start up	<15s
	Operating system	No CPU and operating system
	Board type	Pure hardware pluggable, hot-swappable structure
Input/Output Signal	Input type	VGA,DVI,HDMI,DP,CVBS,SDI,HDBaseT,IP-Video,Fiber
	Input channel	1080P up to 320 channel,4K up to 80 channel
	Output type	VGA,DVI,HDMI,CVBS,SDI,HDBaseT,Fiber
	Output channel	1080P up to 320 channel,4K up to 80 channel
Image processing	Display mode	Roaming, overlay, zoom in/out, multi-windowing, scene switch, PIP, full screen and combination screen
	Input resolution	Single channel 4K: duallink DVI/HDMI/DP
	Scene/Signal switching time	Millisecond-level switching
	Number of signal copy	Up to 16
	Max input/output resolution	3840*2160@30Hz
	Single-screen window	At least 8 windows on each two screens
	Hot-swappable	Support
	Power supply configuration	N+1 redundant power supply structure
	Signal preview	Support
Control function	Control structure	Software /Hardware
	Maximum scenes	255
	Control method	RS232/Network/Touch screen/Keypad and compatible with third party control system
	Management mode	B/S, C/S, Mobile
	Matrix control	Supports digital /analog matrix linkage control
Stability	Safety	Hardware structure, no virus interference
	MTBF	50000h
	Continuity	365 days, 7x24 hours operation
Working environment	Operating temperature	-15~60℃
	Storage temperature	-30~75℃
	Operating humidity	10 to 90% without condensation
	Storage humidity	5~95% without condensation

# ORION

· Website : [www.oriondisplay.net](http://www.oriondisplay.net)  
 · Head office, factory : 217, 1gongdan-ro, Gumi-si, Gyeongsangbuk-do, Korea  
 tel : +82-2-6678-8533 | fax : +82-2-6678-8599  
 · Sales office : 11, Eunhaeng-ro, Yeongdeungpo-gu, Seoul, Korea  
 tel : +82-2-6678-8533 / 8582 | fax : +82-2-6678-8599  
 · Contact : [john@oriondisplay.net](mailto:john@oriondisplay.net)