iSEMC

VK-S

Video Wall Controller

Powerful Video and Image Processing Device

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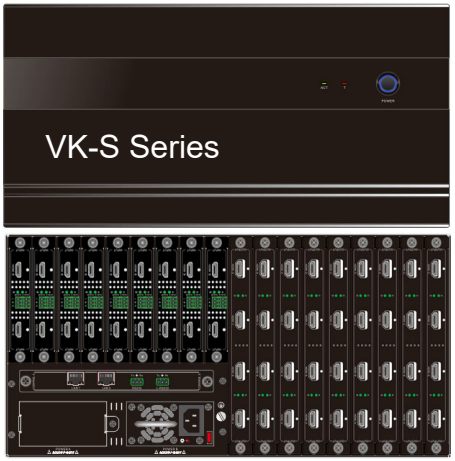
www.isemc.com

VK-S Series

VK-S Series video wall controller is new generation professional video 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, VK-S series has upgraded its system capacity and use 10G base exchange processing chip, so that there is a significant advantage on the processing speed and professional display control. Meanwhile, VK-S series controller supports multiple services, density of I/O interfaces and long term reliability. It is an all-in-one product which has 4K@30Hz input processing, IP-Video Decoding, Content preview, Scrolling text, Scene management, Log management, User management and other advanced applications to meet a variety of professional system application requirements.



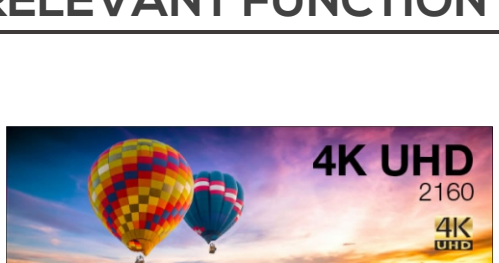
VK-S Series

Video Wall Controller

FEATURES

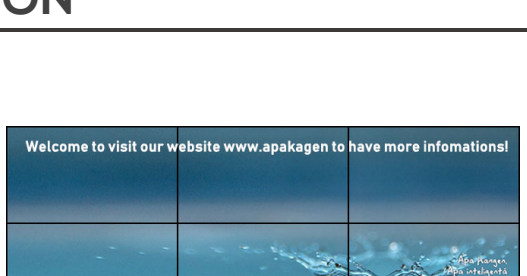
- Pure-hardware FPGA Array, modular design, parallel video processing hardware systems;
- Hot-swappable for I/O modules, control modules, redundant power supply, easy to upgrade and maintenance;
- VGA, DVI, HDMI,CVBS, DP, SDI, HDbaseT, IP-Video input sources and DVI, HDMI, HDbaseT output;
- 4K@30Hz HDMI input, HDCP2.0 for HDMI input and output;
- Opening 2/4 windows on each one screen;
- Up to 4 video wall groups control on single controller and work with variety of display terminals such as LCD, LED, DLP, projector;
- Scene management, including save, switch, recall, recycle;
- Input source previewing and video wall content monitoring;
- Variety of control methods such as RS232, Network and compatible with third party control system;
- 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;
- C/S visualization control platform, support roaming, overlay, zoom in/out, multi-window switching;
- Scrolling text to show news, notifications, or slogan;
- Support background image;
- Picture-in-picture, signal clip and a variety of display modes such as split screen, full screen and combination screen;
- 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

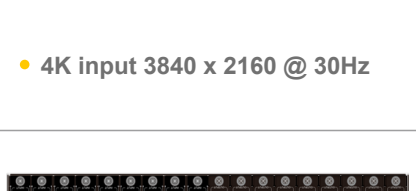


INPUT

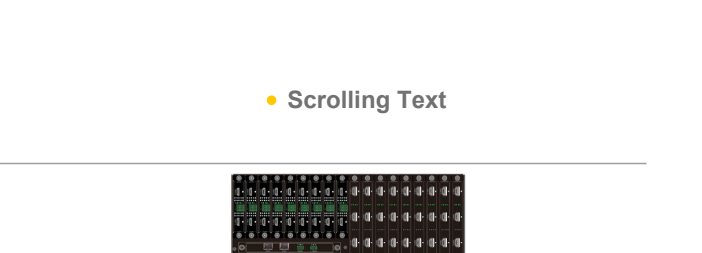
- 4K input 3840 x 2160 @ 30Hz



- Scrolling Text

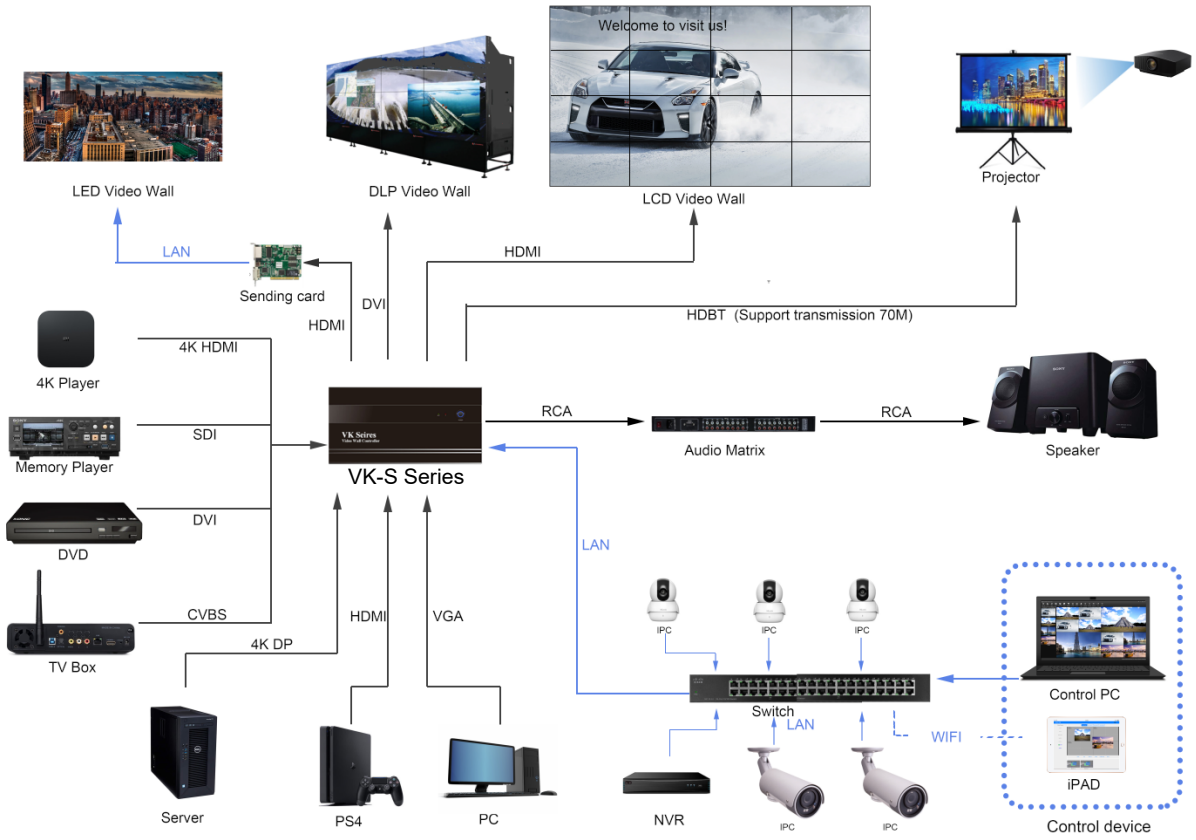


- Audio Output



- Multi-group Control

DIAGRAM

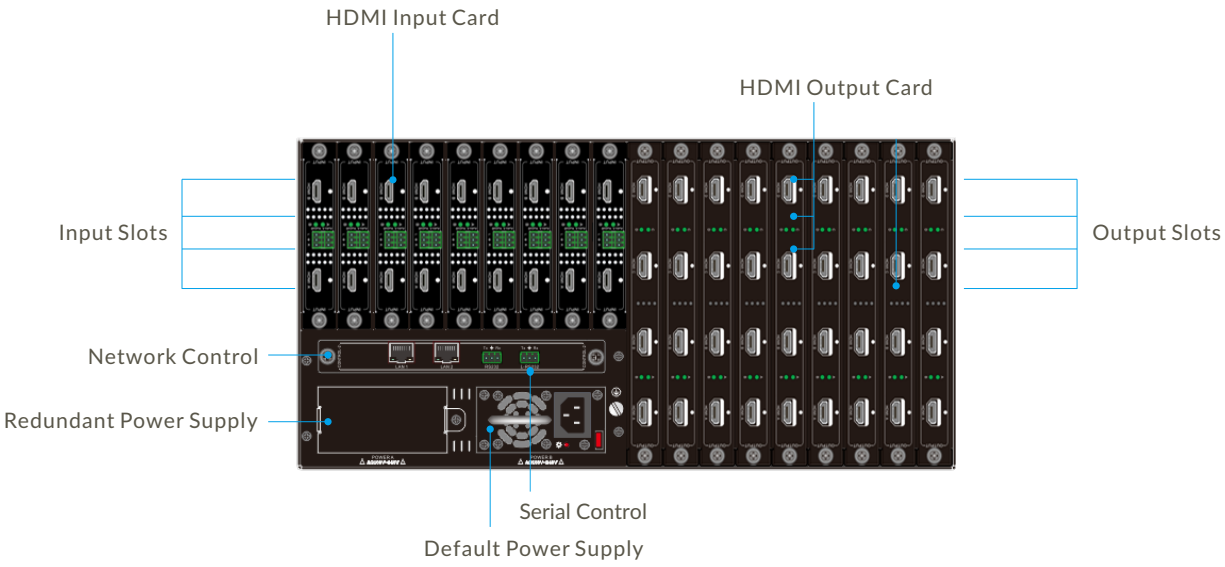


Input:VGA/DVI/HDMI/SDI/CVBS/IP-Video/HDBaseT

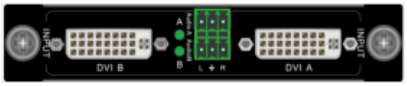
Control:serial,network,third-party control system etc.

Output:DVI/HDMI/HDBaseT;

PRODUCT STRUCTURE



INPUT CARDS

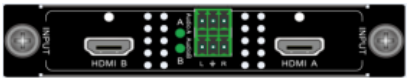


Dual-Channel DVI Input Card

Dual-Channel VGA Input Card

Dual-Channel HDBaseT Input Card

Dual-Channel SDI Input Card

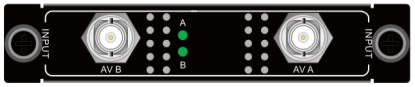


Dual-Channel HDMI Input Card

Single-Channel 4K HDMI Input Card

Single-Channel IP Decording Input Card

Single-Channel 4K DP Input Card



Dual-Channel CVBS Input Card

OUTPUT CARDS

Dual-Channel DVI Output Card

Dual-Channel HDMI Output Card

Quad-Channel DVI Output Card

Quad-Channel HDMI Output Card

Dual-Channel HDBaseT Output Card

SPECIFICATIONS

Device size	4U		5U		9U		13U	
	Input	Output	Input	Output	Input	Output	Input	Output
2 Windows / Screen	8	18	18	36	36	36	72	72
4 Windows / Screen	8	9	18	18	36	18	72	36

Product Hardware Information	System structure	Pure hardware FPGA architecture
	Start up	<8s
	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 72 channels, 4K up to 36 channels
	Output type	DVI,HDMI,HDBaseT
	Output channel	1080P up to 72 channels
Image Processing	Display mode	Roaming, overlay, zoom in/out, multi-windowing, scene switch, PIP, full screen and combination screen
	Scene/Signal switching time	Millisecond-level switching
	Number of signal copy	Up to 16
	Max input resolution	3840*2160@30Hz
	Max output resolution	1920*1200@60Hz
	Single-screen window	2/4 windows on one screen
	Hot-swappable	Support
	Power supply configuration	N+1 redundant power supply structure
	Signal preview	Support
	Running text	Support
Control Function	Control structure	Software /Hardware
	Maximum scenes	32
	Control method	RS232/Network and compatible with third party control system
	Management mode	C/S
Stability	Safety	Hardware structure, no virus interference
	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

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