

VK-B Series

Video Wall Controller

Powerful Video and Image Processing Device





VK-B Series Video Wall Controller

VK-B 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, VK-B 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, VK-B 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.



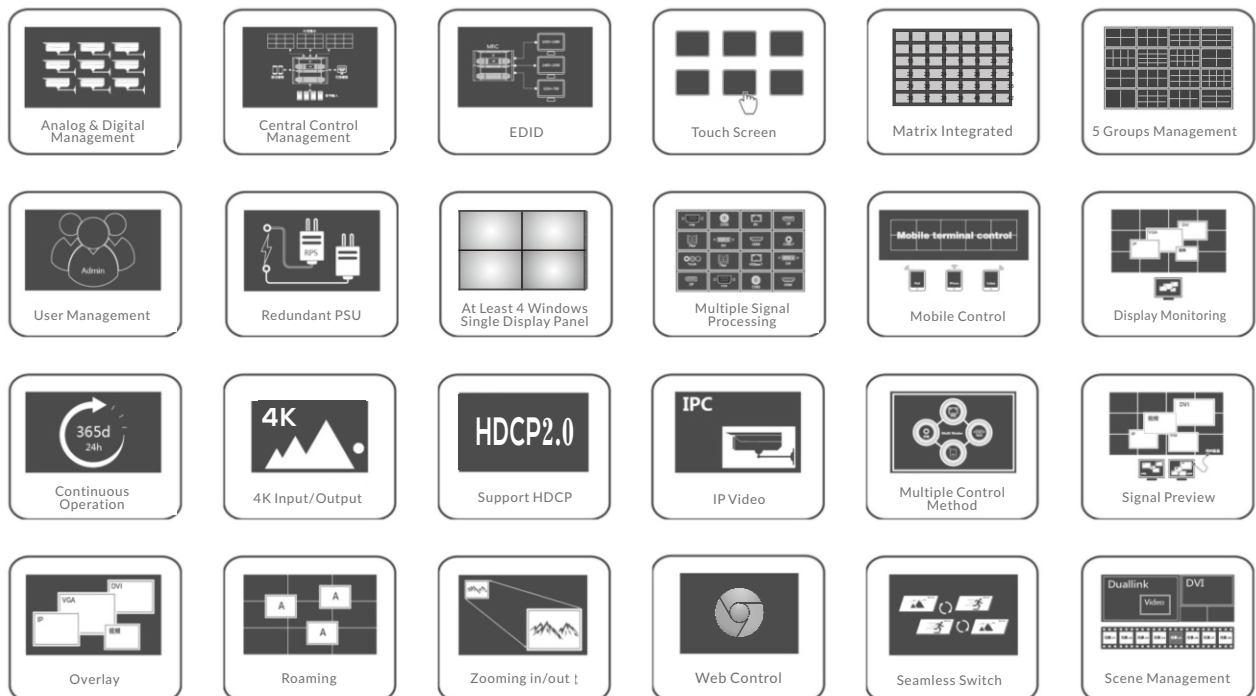
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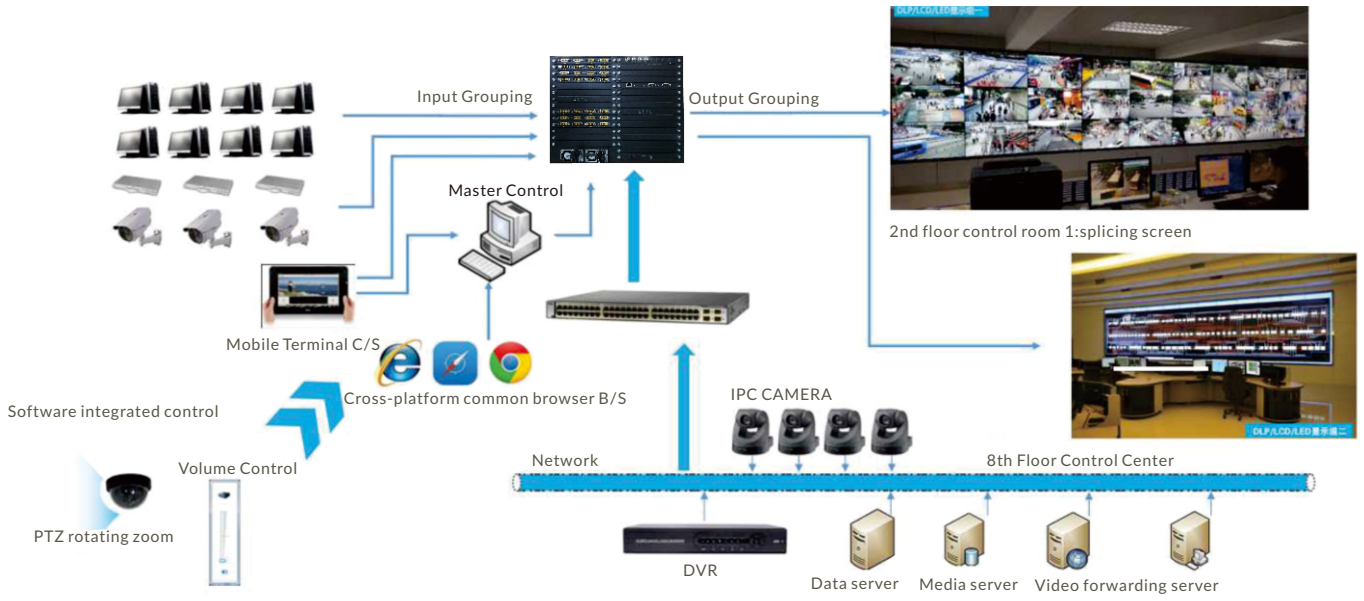
FEATURES

- 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 (more than 5 groups need to be customized) 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 matrix function, able to control 3rd party matrix, friendly to system integrator;
- Support input source previewing and monitoring (refresh rate 24-30Hz);
- Variety of control methods such as RS232, Network, 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;
- 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

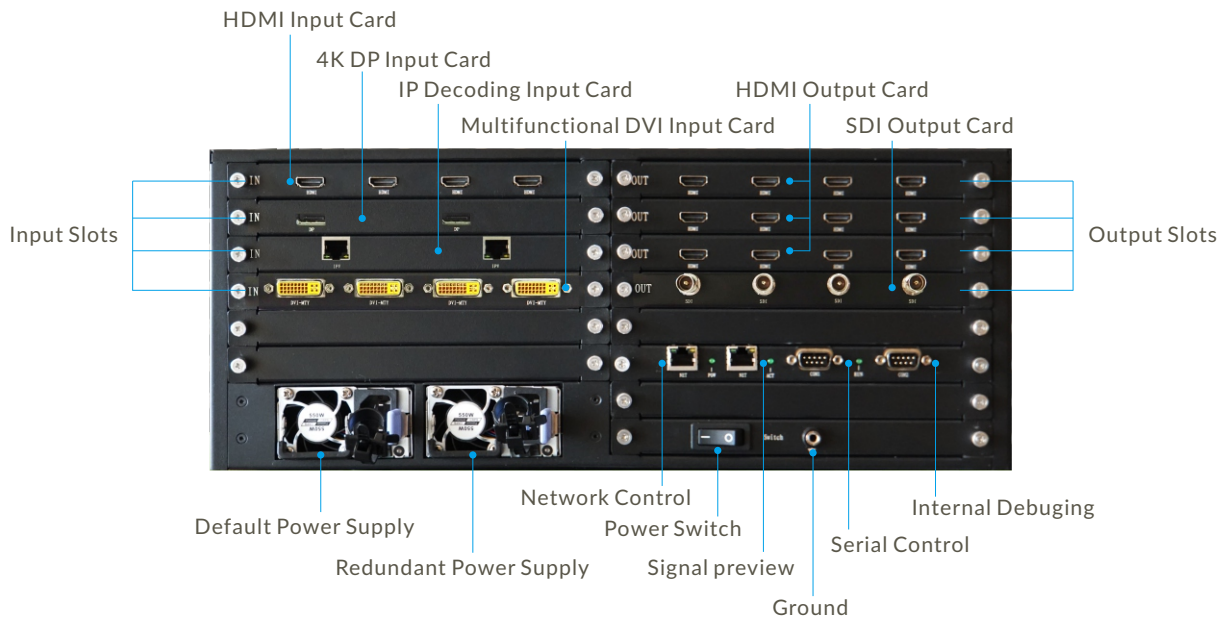


DIAGRAM



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



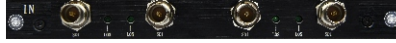
Quad-Channel VGA Input Card



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



Dual-Channel 4K DP Output Card

CONTROL CARDS



Control Card A



Control Card B
(With Signal Preview)

REDUNDANT PSU



SPECIFICATIONS

| Device size | 4U | | 8U | | 16U | | 24U | | 32U(Double) | |
|---------------|-------|--------|-------|--------|-------|--------|-------|--------|-------------|--------|
| | Input | Output | Input | Output | Input | Output | Input | Output | Input | Output |
| Slots | 4 | 4 | 9 | 8 | 20 | 20 | 40 | 40 | 80 | 80 |
| Redundant PSU | 1+1 | | 1+1 | | 2+2 | | 2+2 | | 8+8 | |

| | | |
|------------------------------|-----------------------------|---|
| Product hardware information | System structure | Pure hardware FPGA architecture |
| | Operating system | No CPU and operating system |
| Input/Output Signal | Board type | Pure hardware pluggable, hot-swappable structure |
| | 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 |
| Image processing | Output channel | 1080P up to 320 channel,4K up to 80 channel |
| | 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 | More than the number of output ports |
| | Max input/output resolution | 3840*2160@30Hz |
| | Audio | Embed with HDMI port or seperated from 3.5mm Audio port |
| | Single-screen window | At least 8 windows on each two screens |
| | Hot-swappable | Support |
| | Power supply configuration | N+1 redundant power supply structure |
| Control function | Signal preview | Support |
| | Control structure | Software /Hardware |
| | Maximum scenes | 255 |
| | Control method | RS232/Network/Touch screen/Keypad and compatible with third party control system |
| | Management mode | C/S, Mobile |
| Stability | Matrix control | Supports digital /analog matrix linkage control |
| | Safety | Hardware structure, no virus interference |
| | MTBF | 50000h |
| Working environment | Continuity | 365 days, 7x24 hours operation |
| | Operating temperature | -15~60°C |
| | Storage temperature | -30~75°C |
| | Operating humidity | 10 to 90% without condensation |
| | Storage humidity | 5~95% without condensation |



Beijing Lema Technology Co.,Ltd.

Tel:+86 10 69412688 | Fax:+86 10 69412688
Email:info@isemc.com | Website:www.isemc.com