KLS24

Twenty four port 2 in 1 video controller

Version: v1.2
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Specifications

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Professional Ultra HD Video Display
Control system integrated solution and service provider

Version record

version number	Change details	release time
V1.0	First edition released	2021.03.17
V1.1	Modify the cover	2021.10.25
V1.2	Correct size data	2021.11.18

Summary

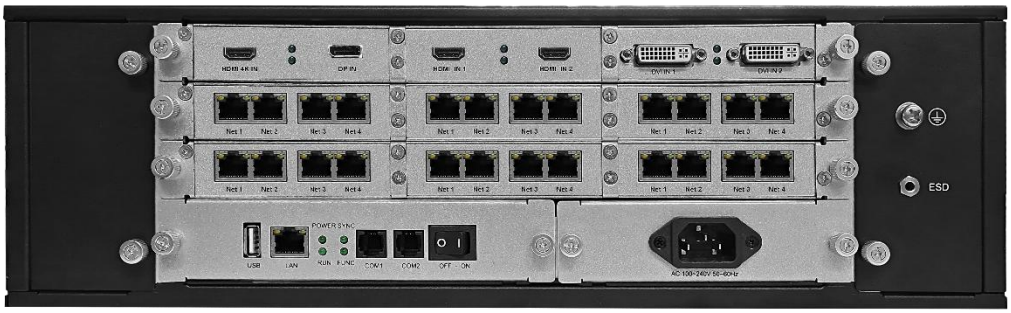
KLS24 is a spell control processor designed for live performance LED large screen. It adopts the industry's top design technology and conforms to international and industry standards. Pure hardware FPGA design architecture, all boards of the product adopt modular design, the input board can be freely selected, which is the industry support 4K@60Hz Input 3U device.

The whole machine has a custom load of 13.8 million pixels, meeting most of the field needs.

Functional features

1. Pure hardware FPGA Architecture: no CPU, no kernel, no poisoning and crash risk, the system runs stably. MTBF > 30000 hours, support 365 × 24 hours continuous operation
2. The single network port carries 650000 pixels, the maximum load of the whole machine is 13.8 million pixels, the maximum width can reach 24000 pixels, and the maximum height can reach 24000 pixels. The single machine has 24 network port outputs
3. Multi screen display, up to 16 screens of the whole machine can be displayed at the same time, and up to 8 screens of single-layer output board can be displayed at the same time. The screen can be displayed across the output network port, and it supports arbitrary superposition and size setting.
4. Available 4K@60Hz Module, support dp1.2, hdmi2.0 input, resolution up to 4096 × 2160@60Hz Or 7680 × 1080@60Hz .
5. Software control, users can directly connect to the host computer software or LAN control, while supporting B / S architecture, users can use the browser to access the device through LAN or Internet for management.
6. Group screen management, equipment supports two groups of screen management, each group of screen corresponding output port resolution can be set separately, to meet the mixed control of various display terminals under the special screen and complex scenes.
7. Super resolution scaling technology, video compensation processing algorithm, no size limit for image reduction, and image details are reserved to reduce the defocus phenomenon after multiple magnification.
8. Crossint splicing processing technology can effectively eliminate splicing dislocation and asynchrony.
9. Mode call function, the user can preset multiple display layout plans, can be called with one key when using, support up to 200 modes.
10. Mobile terminal management function, through the mobile terminal device app software for device parameter setting and signal management, support Android, IOS.
11. Seamless switching function, in the picture of signal switching or mode call, the whole process of no black screen, no flicker, no stuck.
12. The resolution of the device can be set by the user through the EDID function.

Port specification



Input port		
Type	Quantity	Specification
DVI-D（24+1）	2	The maximum supported resolution is 2048×1152@60Hz, and custom resolution is supported ·Compatible with HDMI1.3 and below
HDMI 1.3	2	The maximum supported resolution is 2048×1152@60Hz, and custom resolution is supported ·Compatible with HDMI1.3 and below
HDMI2.0	1	The maximum supported resolution is 4096×2160@60Hz or 7680×1080@60Hz, supports custom resolution, the maximum horizontal width is 8000 points, and the height is up to 4000 points
DP1.2	1	The maximum supported resolution is 4096×2160@60Hz or 7680×1080@60Hz, supports custom resolution, the maximum horizontal width is 8000 points, and the height is up to 4000 points

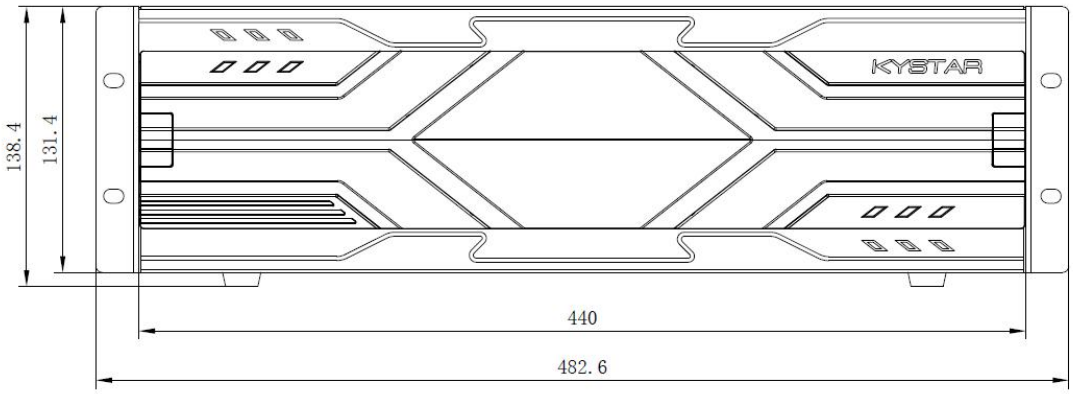
Output port		
Type	Quantity	Specification
LAN	24	LAN port, used to transmit data to the receiving card, Single network port can load up to 650,000 pixels, Maximum width of 4000 and Maximum of 4000 Maximum load of the whole machine is 13.8 million pixels, Maximum width is 24000, Maximum is 24000

control port		
Type	Quantity	Specification
RS-232（DB-9）	1	The data transmission rate is 4800、9600、19200、38400 、57600、115200（BT）
RJ-45	1	100M

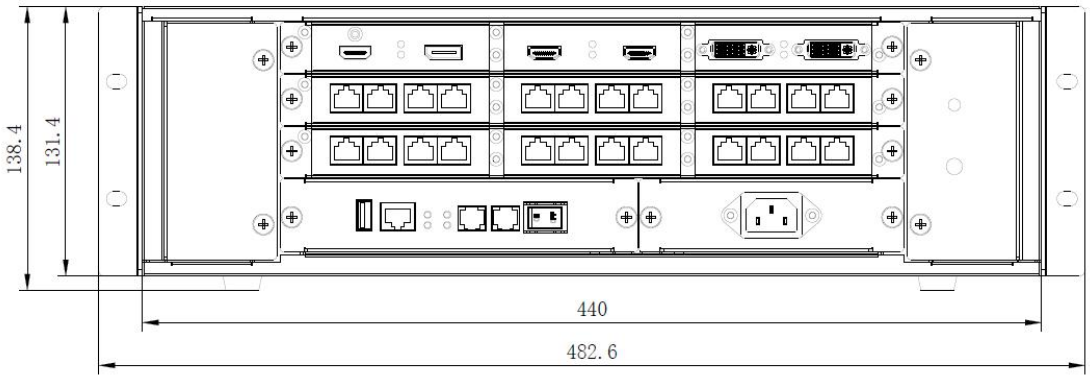
Machine specification	
Input power	100-240V AC~50/60Hz 6.6A
Operating temperature	0-45℃

Dimensions	482.6×315.7×138.4mm（L×W×H）
Net weight	10KG
Machine power consumption	80W

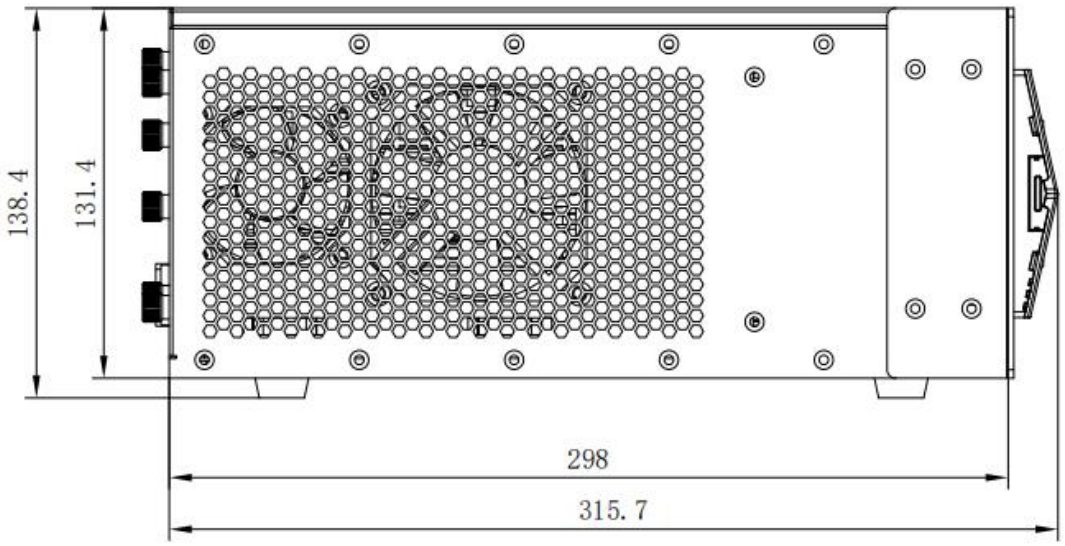
Attachment: equipment dimension drawing



Dimension drawing of front panel



Dimension drawing of rear panel



Side dimension drawing