ES16

LED sending controller

Version: v1.4
Release Date: November 2021
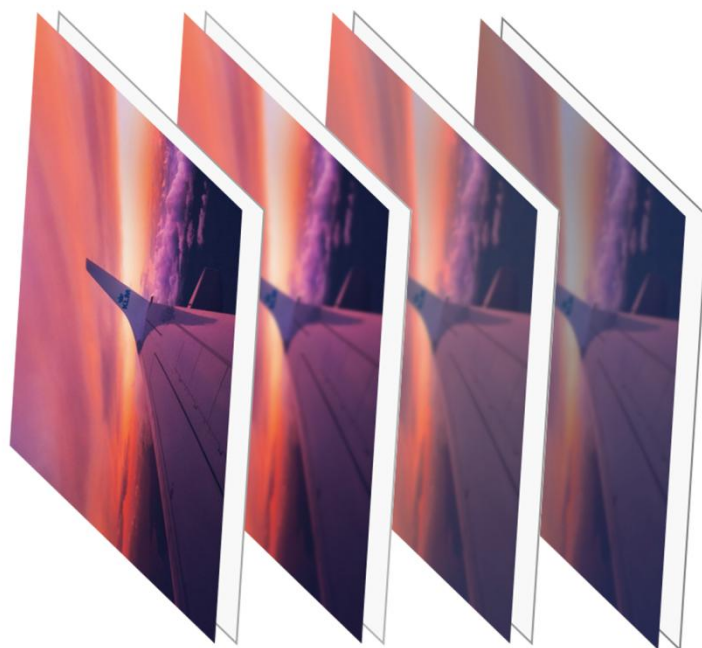
Specification

Summary

KYSTAR ES16 sending card is a master control card that supports large load. It has 18 GIGABit output network ports and supports the maximum resolution 4096*2160@60Hz or 7680*1080@60Hz, and the resolution can be customized, with a maximum width of 8000 pixels and a maximum width of 4000 pixels, meeting the configuration requirements of the ultra-large screen for small space applications, mainly used in rental and ultra-large screen fixed installation fields, such as concerts and stadiums.

Functional characteristics

- Supports a variety of digital signal interfaces, including 1 channel DP1.2,1 channel HDMI2.0 and 4 channel DVI-D input sources.
- Support a maximum load of 10 million pixels.
- Support 18 gigabit network ports.
- Support HDMI2.0 loop out, loop out HDMI input or DP input.
- Support the maximum input resolution is 4096*2160@60Hz or 7680*1080@60Hz.
- Support viewing the input signal resolution and number of received cards on the LCD screen of the front panel.
- Support EDID management.
- Support one-click switch between 2D and 3D.
- Cascaded multiple devices for unified control.
- Support brightness and color temperature adjustment.
- Support low light and high gray.
- Support the Kystar Frame Synchronization (KFS) multi-server Frame Synchronization technology. Together with the Kommander server, Kystar Frame Synchronization (KFS) enables multiple servers to carry large screens of more than 16K point-to-point and ensure complete Frame Synchronization.
- Support SDR to HDR image optimization technology, which can improve the contrast of ordinary SDR videos, enhance the image details, so that ordinary videos have HDR effect.

Panel description
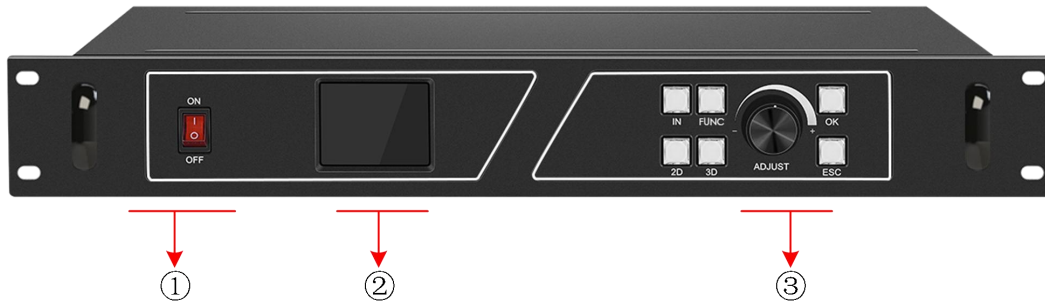
Serial number	Function description
①	Power switch
②	LCD display
③	Function switching area

Port specification


Input port		
Type	Number	Specifications
DVI	4	DVI-D input, support custom input resolution
DP1.2	1	Supports the maximum resolution 4096*2160@60Hz or 7680*1080@60Hz
HDMI2.0	1	Supports the maximum resolution 4096*2160@60Hz or 7680*1080@60Hz
SYNC-IN	1	KFS synchronous signal input

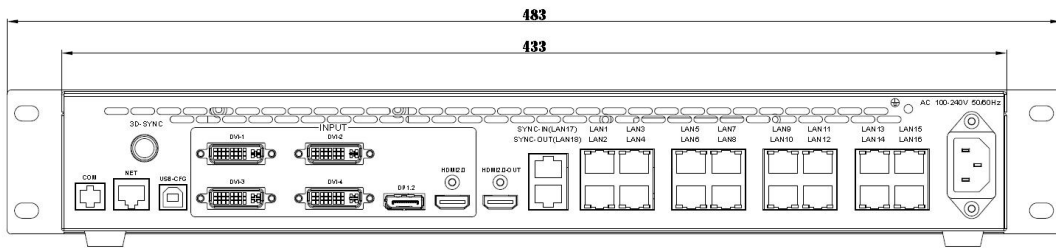| Output port		
Type	Number	Specifications
LAN	18	Single-port loading has a maximum of 655360 pixels
HDMI2.0	1	HDMI2.0 loop out. HDMI2.0 input or DP1.2 input is supported
3D-SYNC	1	3D synchronization signal output
SYNC-OUT	1	KFS synchronous signal output

Control port		
Type	Number	Specifications
COM	1	Communicate with upper computer software to control sending card
NET	1	Communicate with upper computer software to control sending card
USB-CFG	1	Communicate with upper computer software to control sending card

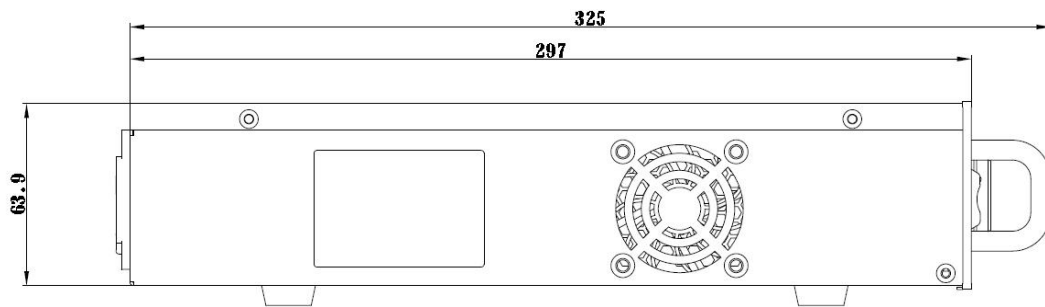| Specification for whole machine	
Input power supply	AC 100-240V 50/60Hz
Working temperature	0-45℃
Outline size	483×325×73mm （L×W×H）
Net weight	5KG
Overall power consumption	80W

Annex: Equipment Dimension Map
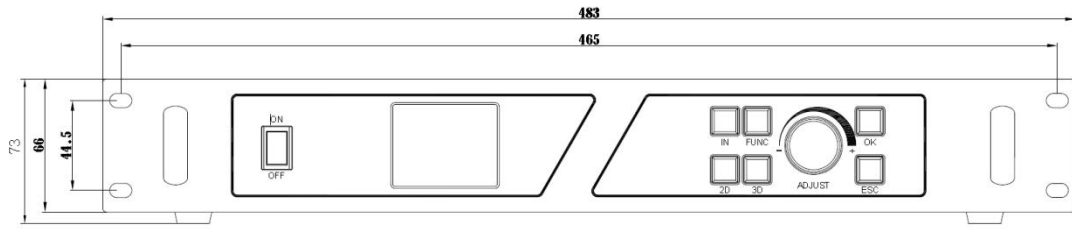
Front panel size(mm)

Back size(mm)

Side size(mm)