onbon 仰邦科技

Specification

OVP-A16 video server

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Instruction

 OVP-A16 video server supports two 1080P HDMI inputs and 1 HDMI 1080P output. Total pixel is ≤8,294,400 points, width is ≤4096, height is ≤2160, and 10 Gigabit output. It supports mixed playback of external video sources and local signals, also supports ultra-long folding screens with a maximum width of 65536 points and supports up to 17 folds. It adopts a quad-core 64-bit Cortex-A55 high-performance processor solution with super decoding capabilities. A single input source supports opening multiple windows, and different interception parameters can be set for each window. Smooth HD video playback and realistic 3D graphics display stunts bring users a more perfect viewing experience.

Features

- Highly integrated equipment: OVP-A series video servers integrate the functions of LED video controller, broadcast control processor, and central control equipment. They have built-in massive materials, can carry LED display screens and LCD screens at the same time. They are suitable for multimedia display application places such as KTV rooms, conference halls, exhibition halls, advertising media, etc.
- Cloud platform management: support information cluster releasing, support cloud platform remote broadcast controlling, support screenshot monitoring and one-key screen shutdown, support city emergency broadcast;
- Synchronous and asynchronous: supports mixed playback of 2-way video input sources and local program information, with arbitrary overlay and flexible combination of images;
- Multiple video zones: Supports 2 external video zones and multiple local video zones
- Super long load: Support 4K@30Hz video output. Asynchronous mode supports 65,536 points of ultra-long load;
- Single source with multiple windows: support opening multiple windows for a single signal source, and each window can set different interception

parameters, making window opening and splicing more flexible;

- Monitoring function: 1 HDMI1.3 monitoring interface, real-time synchronization of LED display screen. It can also be configured into multi-screen display mode to play different programs independently;

- Interfaces: RS232/RS485/DMX and multi-channel I/O interfaces are standard, supporting MODBUS protocol and DMX protocol, supporting convenient access to various smart home controllers, lighting controllers and MODBUS industrial terminals (environmental sensors, etc.); LAN/WiFi interface is standard, 4G interface is optional, supporting MQTT protocol, seamlessly connecting to the IoT(Internet of Things);

- U disk playback: plug and play

- Multi-terminal broadcast control: support PC software broadcast control, mobile phone APP intelligent broadcast control, cloud platform remote broadcast control, and U disk playback;

- Built-in LINUX system, more stable and safer

Functions

Control area

OVP-A16 video server has 16 Gigabit output ports, total pixel≤8,294,400 points, maximum width is 4096 pixels, and maximum height is 2160 pixels. It has a flexible control area, rich display functions, and high cost-effectiveness.

Support high refresh

OVP-A series products support high refresh (refresh here refers to the scanning refresh of receiving card for LED screen). When users use cameras or mobile phones to shoot LED large screens, the picture will not be distorted, there are no scan lines, it is real and natural, and the effect is excellent. It supports arbitrary adjustment of the picture movement speed, the picture movement is smoother, and the text shifting to the left is smoother.

Strong decoding capability

H.264/H.265 format can support to 4096*2304@30fps
VP9 format can support to 4096*2304@30fps

H.263 format can support to 720*576@60fps

Long folding screen

Support screen folding, total width can reach to 65536 points

Pre-monitoring

Supports one 1080P HDMI output pre-monitoring, which can display the monitoring screen in real time, making the picture accurate and controllable.

HD video playing

Provides 2 HDMI inputs, external video can be played as a video area to achieve a picture-in-picture effect. External video sources can also be played in full screen to achieve a synchronous effect.

Synchronous and asynchronous

Supports arbitrary overlay of HDMI input and local media resources, flexible combination, and mixed playing.

Single source and multiple windows

A single input source supports opening multiple windows, and each window can set different interception parameters, making window opening and splicing more flexible

Management platform

Controller provides a variety of management software platforms, including PC software Ledshowsuite and cloud platform iLEDCloud.

Ledshowsuite supports win10, Kylin, and Tongxin. Also provides comprehensive and rich controller configuration, program scheduling, and program sending functions.

iLEDCloud is a multimedia information publishing platform provided by onbon Technology. Core server is placed on Alibaba Cloud, which is very reliable and stable. Users only need a browser to use the platform, and can remotely edit programs, preview programs, play them at fixed times. Users can log in and use the cloud platform through mobile phones, pads, and PCs.

If the user is in a LAN application environment, they can choose our Ledshowsuite to control and manage. If user needs to cross the public network, they can access the iLEDCloud cloud platform and manage it through a web browser.

Publish programs

Users can use Ledshowsuite to arrange, preview and publish programs. If it is inconvenient to connect to the Internet, you can also use a USB flash drive to import programs or plug and play.

Upgrade remotely

Supports remotely upgrading. Users can remotely upgrade through Ledshowsuite and iLEDCloud to improve controller's functions and performance and solve bugs.It has a built-in log function that can record various important events, which can be remotely viewed, analyzed, and troubleshooted.

Support kinds of sensors

It can be connected to brightness sensor through onboard interface or connected to various environmental monitoring sensors and negative ion, liquid level, and rainfall sensors using USB-RS485 adapter cable. It can accurately measure and display temperature, humidity, brightness, noise, PM2.5, PM10, wind direction, wind speed, negative ions, liquid level, and rainfall values. It provides customers with accurate data references in places where temperature, humidity, or noise need to be strictly controlled.

Timer on/off

Software has a timer power on/off function. After setting power on and off time, the computer will automatically power on and off on time, making rational use of human and material resources, greatly improving the life and reliability of the display. When it is inconvenient for users to operate computer frequently, timer power on/off can better realize the unattended function.

SDK

It supports dynamic areas and provides a complete set of development tools for c#, java, VB, and C++. It supports C++ development of Linux systems, and the communication protocol is open, supporting http protocol communication. Users can perform secondary development of the controller according to their needs to achieve special functions.
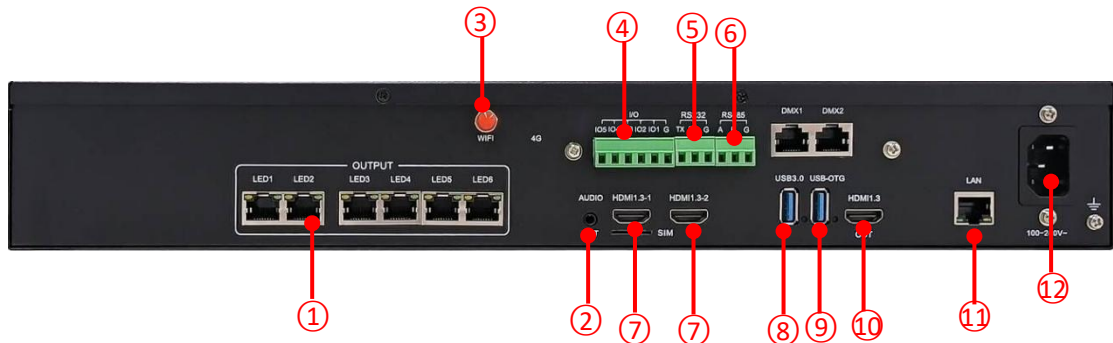
Panel Instruction

Front panel

Interface instruction	
1	Power switch
2	Input source selection key area has totally 4 keys, [IMG] ~ [HDMI], and 2 input source selection keys, which correspond to the input interface labels on the back panel.
3	2.8" full color LCD（320×240）
4	Shortly press [OK]: enter into main menu or confirm the input.
5	**FUNCTION area** [MODE]：enter into program list. ESC USB/EXIT：USB display button, when you use USB port to display, it can be "EXIT", exit USB playback mode. [BLACK]：When press BLACK button and indicator light is lighting, then, the output is in black screen status.
6	**Front USB2.0 port:** When connect with U disk as input source, it requests as below: **U disk file system:** Support FAT32; Don't support exFAT(FAT64), also U disk cannot be partitioned and to be used as system startup disk; Picture：PNG 、BMP、 JPG 、gif Video：*.mp4、*.mkv、*.ts、*.mov、*.avi、*.m4v、*.flv、 *.vob、*.webm、*.mpg

Back panel

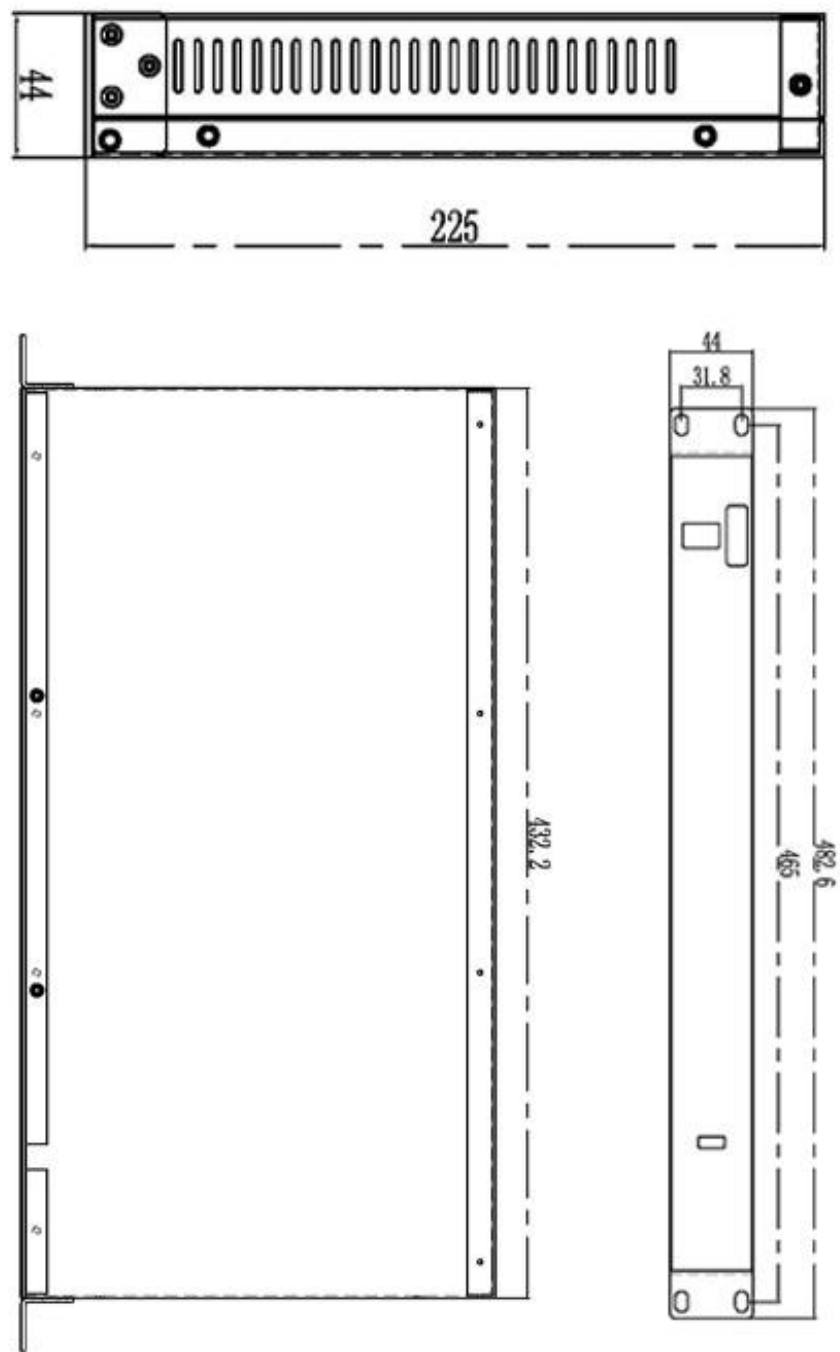| Interface instruction	
1	**Gigabit**：16 gigabit output ports, connect with receiving cards.
2	**AUDIO OUT**
3	**WIFI**：connect with WIFI antenna.(controller connect with external WIFI network)
4	**I/O*5**
5	**RS232*1**
	4G*1　(optional)
6	**RS485*1**
7	**HDMI 1~2**：video input
8	**USB 3.0×1：Supports connecting common USB devices such as mouse, keyboard, and U disk**
	USB：Support FAT32; Don't　support exFAT(FAT64), also U disk cannot be partitioned and to be used as system startup disk;
	Picture：PNG 、BMP、 JPG 、gif
	Video：*.mp4、*.mkv、*.ts、*.mov、*.avi、*.m4v、*.flv、 *.vob、*.webm、*.mpg
9	**USB OTG**
10	**HDMI1.3**： output
11	**LAN**
12	**Power supply**：100-240V~50/60Hz

Specification parameters

Output signal	
NET×6	16 gigabit output ports, connect with receiving cards. Total pixels≤8,294,400，maximum width is 4096，maximum height is 2160

Complete parameters	
Input voltage	100-240V~50/60Hz
Power	≤50W
Working temperature	-30℃～70℃
Environmental humidity	15%~85%
Control	LedShowsuite
Dimension	482.6mm×225mm×44mm
Case	1.5U
Weight	≤3.5Kg

Dimension

单位：mm

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iLEDCloud

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