ZH LED Control System

ZH-P30

Video Splicing Server

Product Specification

Video Splicing Processor Specification

ZH-P30

Introduction

ZH-P30 video splicing server is a new high-performance video image processing system with pure hardware architecture and no operating system launched by ZH company to cater to the high-resolution and small-pitch market. It can display multiple dynamic images on multiple screens, realize the function of multi-window splicing. It is widely used in water conservancy, electric power, meteorology, enterprises, production, education, banking, transportation, radio and television, military stages, leasing and other fields.

ZH-P30 can be used as a 2-in-1 video processor, or as a video splicing processor. It adopts modular configuration, and the board adopts plug-in structure design, which can be flexibly configured according to needs. Hot plugs for input and output cards, stability, and convenient operation.

ZH-P30 is based on a powerful, high-speed hardware FPGA array architecture and modular design concept. It has the advantages of high stability and fast startup of pure hardware architecture; at the same time, it supports flexible configuration of common input interfaces such as HDMI, DVI, DP, VGA, CVBS and IP. 4K high-definition video input and output. Equipment maintenance is simple and the failure rate is low.

ZH-P30 adopts B/S architecture, no need to install applications, it can be operated in Windows, MAC, iOS, Android and Linux environments, supports multi-user online operation, supports multi-screen and multi-layer management, and supports input and output EDID management, preview display, support source name modification, support information synchronization, support online firmware version upgrade, etc.

Features

1. Full hardware FPGA architecture, low failure rate, board-type modular design, support hot plugs, and stability;
2. RS232, RS485, RJ45 and other interface debugging methods;
3. Common video ports such as HDMI, DVI, DP, VGA, CVBS, IP, etc., and supports EDID management;
4. Input resolution: single signal source maximum 4096*2160@60Hz, support resolution setting;
5. High-definition video interfaces such as network port, optical port and HDMI, and supports arbitrary splicing up and down, left and right;

6. Single sub-card output: network port*20pcs or network port*16pcs+optical port*2pcs or HDMI2.0*1pcs or HDMI1.4*4pcs, etc.;

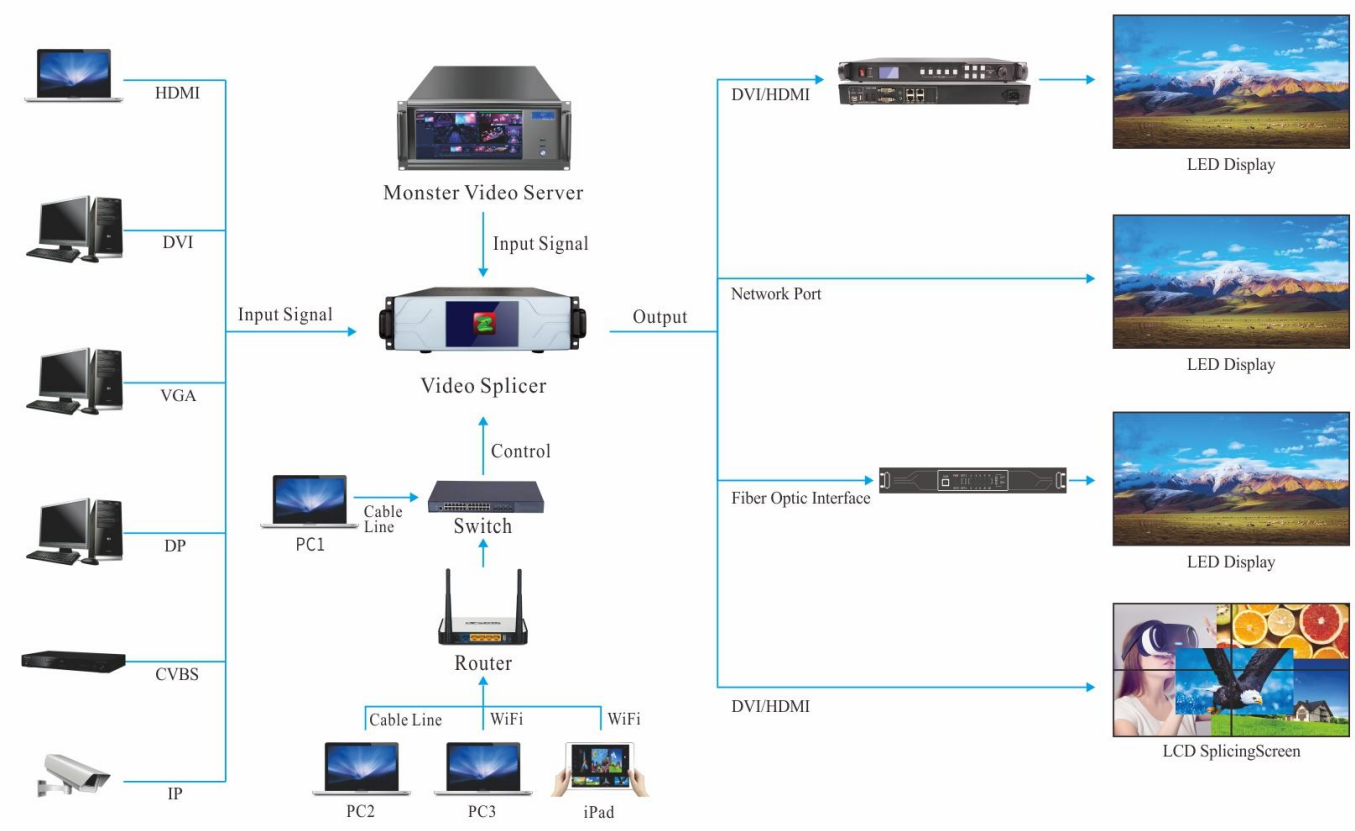
7. Preview echo and multi-screen and multi-layer management;

8. B/S architecture management and multi-user online operation;

9. Arbitrary switching of video sources. The input image can be roamed, spliced, and scaled according to the display resolution;

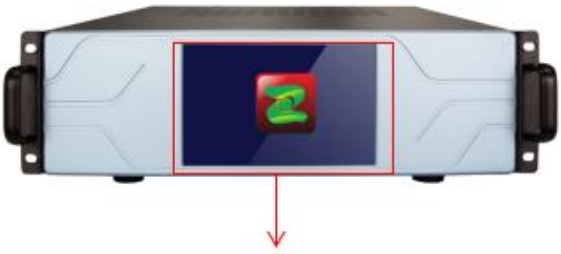
10. Online upgrade, single device support up to 16 layers to play;

System Topology Diagram



Hardware

Front



LCD screen

LCD screen	Display device status and operation interface

Back

Control card	Signal input	Signal output	Power supply
Debugging and central control interface	Access input signal	Access output signal	AC220V

Parameters

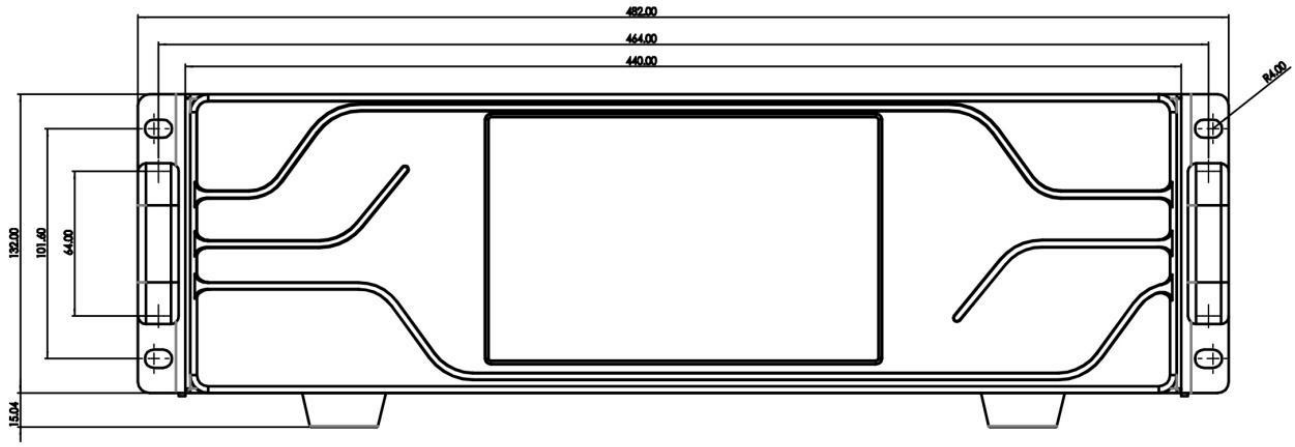
Input and output cards optional		
Input cards optional	Types	Quantity
	HDMI 2.0	HDMI 2.0 x 2
	HDMI 1.4	HDMI 1.4 x 4

	DP 1.2	DP 1.2 x 2
	DVI	DVI x 4
	VGA	VGA x 2
	CVBS	CVBS x 2
	IP	LAN x2
Output cards optional	Types	Quantity
	Internet port card	LAN x20
	Fiber card	LAN x16 + 2 SPIF
	HDMI 2.0 video card	HDMI 2.0x1
	HDMI 1.4 video card	HDMI 1.4x4

Parameter	ZH-P30
Max loading	2600W Pixel
Input card quantity(max)	2
Output card quantity(max)	2
Layers	Single output card supports 4 layers
Preview	Support
Echo	Support
Preset scenes	65536
Screen cropping	Support
Seamless switching	Support
Control manner	Gigabit Ethernet port, USB, central control protocol
Hot plug	Support
LCD screen	Device interface status, communication information, chassis temperature, preview and echo, etc.
Advantages	Configuration flexible, full functions,smooth and stability, easy maintenance

Dimensions

Unit:mm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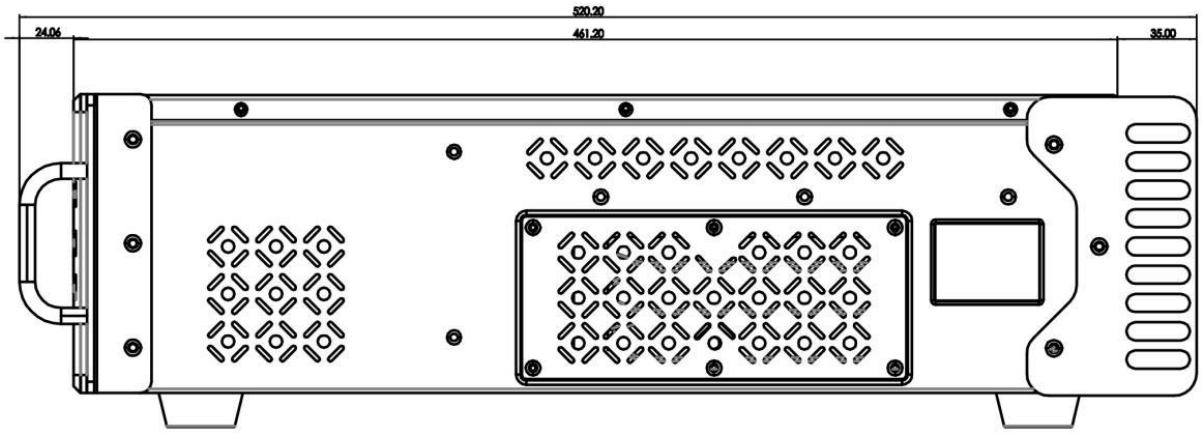
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