



# SEAMLESS MATRIX SWITCHER MULTI SCREEN PROCESSOR

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## Product Introduction

series multi-screen splicing processor is a pure hardware architecture, no operating system, high-performance video image processing workstation, can be widely used in security monitoring, exhibitions, military command, education and scientific research, government announcements, commercial display and other industries.



Picture 1.1 3.5U chassis



Picture 1.2 7U chassis

## Features and Functions

### system structure

- Input board, output board, switch board, fan, power, dust and other major modules are card-type design for daily use and maintenance has brought great convenience
- **expansion slot support input and output** FPGA-based hardware design with high bandwidth for accessing and

processing the high-definition signal

- **modular card based board any mixed interpolation**
- **Support up to 4 groups of display wall group management**
- **Output mapping**

Engineering site construction more flexibility to achieve the equipment and display unit between the connection wire without a one-to-one, can be adjusted at any time in the software.

## Video image processing

- A signal source can be displayed on the  $M \times N$  ( $M \geq 1, N \geq 1$ ) display units □
- Support signal window, roaming
- support layer overlay, support up to four layers of single-screen layout
- multi kinds of signal sources are supported, including VGA, DVI, HDMI, BNC, SDI, YPbPr, Ultra HD and IP camera input □
- Live view in the roaming window and signal source list □
- Fluent video output

- Users are able to manage the signal source and video wall via client software
- A build-in matrix for opening a signal source on several windows at the same time
- support the input signal character overlay, you can control the software to change the font type, size, background color, foreground color, display position and other parameters
- Intelligent zoom technology, image scaling using intelligent multi-phase filter algorithm, according to the characteristics of the image automatically select the optimal filter coefficient, the image close to the loss level zoom effect, to ensure more details, edge jagged and good sharpness
- Support multi-channel ultra-high resolution background picture and virtual LED image
- support seamless switching, processor integrated high-definition signal processing mechanism to ensure that the signal switch without delay, no blue screen, no black screen and other intermediate transition state

### Network and multimedia processing technology

- **IP stream real-time decoding, support H.265**

- **support multimedia information on the screen**

Video, pictures, digital titles, rolling banners, electronic clocks, real-time weather and other control display, graphic information editor, to meet a variety of display device information on the screen

- **comes with a playback system that supports all kinds of media formats**

Support (rmvb, avi, mpeg, dat, mov, mkv, wmv, etc.), audio (mp3, wma, wav, etc.), pictures (jpg, gif, png, etc.); support streaming TV, Etc., support PDF, office documents, dynamic web pages, weather, time, rolling subtitles and so on

### Other characteristics of value-added features

- **Support redundant power supply,**

a normal use of power, a backup power supply. When the normal power supply fails, it automatically switches to standby power.

- **Support for BS control / support for cross-platform control**

No need to install any client software, support web login control; support windows, IOS, MAC OS, Android, Linux and other operating systems cross-platform control.

- **chassis fan speed according to the device temperature adaptive**
- **Support pre-operation mode**, if open this function, all the window operation will not take effect immediately, need to click confirm button and then all the operations will take effect

Multi-screen splicing processor			
Sort	Chassis Number	3.5U Std	7U Std
Chassis scale	Input slot (PCIE IN)	4	9
	Output slot (PCIE OUT)	5	9
	Mixed slot (PCIE MIX)	0	0
	Master slot (PCIE MAIN)	1	1
	Serial port expansion Solt (PCIE UART)	1	1
Communication control	The Master expands input & output	Not support	
	Network control	Standard	
	RS232、RS485control	Standard	
	RS485、RS232vRing out	Standard	
	Serial expansion board	Standard	
	CS Client control	Standard windows graphical splicing control software, easy to use	
	BS control	Optional	
		No need to install any client software, support web login control	
	Cross platform control	Optional	
		Support windows, IOS, MAC OS, Android, Linux and other operating systems cross-platform control	

Multi-screen splicing processor			
Sort	Chassis Number	3.5U Std	7U Std
Video input (Optional)	HDMI input board	Support 4/2 channel HDMI signal input, HDMI type A interface, support HDCP, maximum support resolution 1920 * 1080 @ 60Hz;	
	VGA/YPbPr input board	Support 4/2 channel VGA or YPbPr signal input, the maximum support resolution of 1920 * 1080 @ 60Hz; each two can be configured by short jump to VGA input or YPbPr input	
	CVBS input board	Support 16/8 channel CVBS signal input, every 8 a DB15 interface (female), support PAL / NTSC standard, support brightness, contrast, gray, saturation adjustment	
	2 way HDMI+2 way VGA input board	Supports 2 HDMI and 2 VGA inputs, HDMI Type A connector (female) and 15 pin D-sub interface (female)	
	HDMI 1.4 4k input board	Support two HDMI 1.4 input (2 cut 1 use), the maximum support resolution of 3840x2160 @ 30Hz;	
	IP Streaming media input board	Support 2/1 RJ45 port input, single port support 4-way 1080P, 9-channel 720P, 16-channel D1 video decoding, support H.264 video compression format	
	IP Streaming media input board	Support 1 channel RJ45 port input, single port support 16-channel 1080P, 32-channel 720P, 64-channel D1 video decoding, support H.264 and H.264 video compression format	
	Andrews Multimedia Letter input board	Support the 2/1 road Andrews system daughter board input (each channel maximum output resolution 1080P), each Andrews configuration: CPU: Cortex-A7 eight nuclear; memory: 1GB DDR3; storage: 16GB EMMC; support CS, BS architecture information release System support; support for digital titles, rolling banners, support for electronic clocks, real-time weather and other control display, support for independent editing of graphic information to meet a variety of display devices on the information release on the screen	
	Andrews Multimedia Letter input board	Support: 1 channel Andrews system daughter board input (maximum output resolution of each channel 3840x2160), Andrews configuration: CPU: Cortex-A17 quad-core 1.8GHz; memory: 2GB DDR3; storage: 16GB EMMC; support CS, BS architecture information release system; Support digital title, scroll banner release, support for electronic clock, real-time weather and other control display, support for self-editing graphic information to meet a variety of display devices on the information release on the screen	



Multi-screen splicing processor				
Sort	Chassis Number	3.5U Std		7U Std
Video output (Optional)	DVI output board	Single board 4/2 output, DVI-I interface (female), the maximum support resolution of 1920 * 1080 @ 60Hz		
	HDM output board	Board 4/2 output, HDMI Type A interface (female), support HDMI1.3 and digital signal protection protocol HDCP, maximum support resolution 1920 * 1080 @ 60Hz, support with the audio output		
Image Processing	Matrix switching	The processor comes with a matrix function that supports all input signals to switch to all output ports.		
	Screen splicing	Support any combination of splicing, support the screen window, roaming, overlay, zoom function.		
	Public area window	Standard, public area maximum support four-layer window overlay.		
	Screen segmentation	CVBS video signal maximum support single-screen 16 division; IPC network signal support maximum single-screen 64 division		
	OSD character overlay	Support the input signal OSD character overlay function, you can control the software to change the font type, font size, background color, foreground color, display position and other parameters.		
	Input image cropping	Supports any cropping of input images		
	Ultra high resolution Static basemap (optional)	<=1 channel	<=4 channel	<=1 channel
		Support ultra-high resolution static image overlay display. When the base map is opened, the bottom window channel is occupied by default. The bottom view shows three modes: all screen single-screen display, all screen splicing display, partial continuous area splicing display.		
	HD vector subtitles (optional)	Optional		
		Ultra-high point-to-point vector subtitles, support for dynamic subtitles and static subtitles, you can edit the display content, fonts, colors and other parameters.		
	No black real-time switch	Seamless switching with no time delay		
	Edge shield	Support edge mask function, you can set the size of the screen edge.		
Display control	Output map	Engineering site construction more flexibility to achieve the equipment and display unit between the connection cable without a one-to-one, can be adjusted at any time in the software		
	Screen group	A single processor supports up to four sets of display wall settings.		
	Scene mode	Maximum 32		

Multi-screen splicing processor			
Sort	Chassis Number	3.5U Std	7U Std
Other features Value-added function	Redundant power supply	Optional	
		Support a normal use of power, a backup power supply. When the normal power supply fails, it automatically switches to standby power.	
	Intelligent temperature control	Optional	
		Real-time detection of the processor internal temperature, and automatic control fan switch.	
	Input and output board Automatic detection	Real-time detection of all the current processor board inserted.	
	The input signal automatic detected	Real-time detection of each input whether there is signal access, input board and client software has a status indication	
	Pre-operating mode	After the pre-operation mode is turned on, the operation of all windows will not take effect immediately. Click OK to confirm all operations.	
Other parameters	Remote control, button	not support	not support
	LCD	not support	not support
	Power	200W blade power supply Voltage: 110-240V	350W blade power supply Voltage: 110-240V
	Power consumption	<150W	<300W
	Working temperature	Working temperature: -10 °C ~ 50 °C	
	Working humidity	Relative humidity: 5% to 95% non-condensing	
	Size	Width x depth x height (mm) : 437 x428 x133.5	Width x depth x height (mm) : 437 x428 x311.5
	Weight	<=20Kg(With full)	<=35Kg(With full)

● **Information order:**

General partnumber: FLD-VP-XY-Z

- FLD: Products of FOLAIDA.
- VP: Video wall processor.
- X: Number of inputs.
- Y: Number of outputs.
- Z: Type of inputs/outputs connection(blank = HDMI, D=DVI, V=VGA, Y= YpbPr, C= CVBS)

Exam:

- FLD-VP-0408: FOLAIDA Video wall processor with 04 HDMI inputs, 08 HDMI outputs.
- FLD-VP-1616D: FOLAIDA Video wall processor with 16 DVI inputs, 16 DVI outputs.