

# High-End

## Video Wall Controller



### MULTIPLE LAYERS FPGA VIDEOWALL CONTROLLER



## Hardware Based Design

High performance video processing equipment with hardware architecture design.

- ★ No more computer high-end specification.
- ★ No more high-end Graphic Processing Unit (GPU Card).
- ★ No more licenses.
- ★ No more blue-screen OS crash.
- ★ No more viruses and black screen.
- ★ No more ransomwares, lost data.
- ★ Support up to 152 input x 144 output (20U Chassis)

## FPGA Dedicated Chipset

Dedicated Field Programmable Gate Array (FPGA) chipset is a combination of processing unit that dedicated in video processing. This eliminated the limitation of a CPU or a GPU from conventional Software or PC controller.

Without the use of PCI - Express card, the unit can work flawlessly when adding or editing the total layout of the videowall set up. As each of the FPGA chip is working independently, user can replace or add new input / output card without turning off the whole chassis.



## Module design with Hot Swap

Multiple form of connections for client to custom fit their system. Client can now combine HDMI - DVI - VGA - HDBaseT - IP Streaming in one total solution, maximizing system intergration.

Reduce the total cost of investment in both pre & post phase of expansion. Chassis also support control multiple videowalls, further simplify the complexity of connections and management.



## Features

### ● High-end Multi Layers MPiP™ - Cross Screen

Support up to 2 Layers Matrix Picture in Picture (MPiP™) in each screen

### ● Easy control with Drag & Drop

Customize complex layout with simple Click - Drag - Drop

### ● High-end Video Wall Control

Support Overlap, Roaming, Stretching, Zoom in / out.

### ● Front Panel Touch Screen

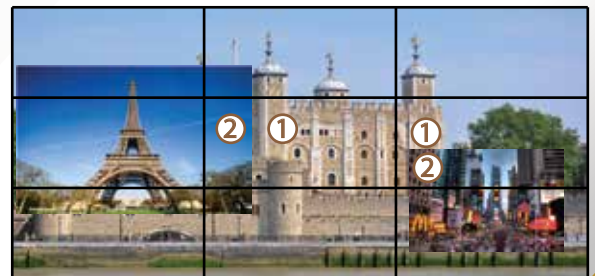
Control scene mode, save / recall profile, IP setting with just a touch

### ● IP Camera Direct Stream (iDirect Stream™)

IP input Card can support streaming video feed direct from IP CCTV Cameras.

### ● Background Image - Scrolling Text - Scheduling

Support Static Background Image and Scrolling Text for Bank and Stock house Video Wall  
Support scene mode Scheduling - Cycle for advertising - digital signage Video Wall



## VIDEO WALL CONTROLLER

152 x 144 / 164 x 132 Cross Screens Video Wall

### Features

- Pure Hardware Structure - FPGA
- Modular Design
- Seamless Switching
- Bezel Compensation
- Scrolling Text
- Character Superimposition
- Ultra HD Background Image
- Multiple video wall management
- Signal preview(Optional)
- Support Redundant Power Supply



### SPECIFICATION

Start up time	10s
Switching time	5ms
Chassis size (mm)	20U   440 x 400 x 890 mm
Max Data Rate	15.2 Gbps (3.8Gbps per Lane)
Input Interface Port	4 - 164
Output Interface Port	4 - 144
Interface Support (Input / Output)	VGA / CVBS /YPbPR / SDI / IP HDBaseT/DVI/DP/HDMI/Fiber
Total number of Input / Output channel	256 channel 4K / 512 channel 1080p with Smart Management Grouping

Control	Over IP / RS-232 / Touchscreen RS-232 out / WEB GUI (OPT)
HDMI version	1.3 - 3D, Deep Color/ 2.0 with 4K cards*
HDCP version	1.4 / 2.0 / 2.2
Distant support	18-300m with AOC cables / Extenders
Resolution Input / Output (8 Bit RGBA color)	1280 x 720 @ 120Hz 1920 x 1080 @ 60Hz 1920 x 1200 @ 60Hz 4092 x 2160 @ 30Hz

Software Language      English / Chinese / Vietnamese  
other language available on request

Processing chipset	FPGA - Tritium™ 2 <sup>nd</sup> gen
Screen layer	2 Layers - *Up to 4 Layers MPiP™
Hot-swap   EDID	Support   Auto EDID
Power supply	Main - Support Redundant (OPT)
Preview signal	Support Preview card- (OPT)
Interface link	Analog - Digital - IP Stream
Output restriction	Support all type of display (Screens / Projectors / DLP / LED)
Mobile Control	Support iOS & Android
One click ON/OFF	Support

Pixel Clock	225 Mhz
HDMI impedance	100 Ω - ESD Protection
Power Rating	100-240 VAC; 50/60Hz
Power Consumption	100 - 450W   Max : 1500W
Fan Airflow	55 - 65 cfm (12VDC)
Operating Temperature	-15 ~ 65°C
Storage Temperature	-30 ~ 75°C
Storage / Operating Humidity	5~95% RH /10~90% RH (without condensation)

\*8 Layers MPiP™ configuration will allocate double output video bandwidth on each port, the total number of output operational ports will be reduced in half.  
\*HDMI 2.0 is supported when connect to 4K HDMI / 4K DP input and output cards.

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152 x 144 / 164 x 132 Cross Screens Video Wall

### HYBRID I/O SLOT

Advance FPGA chip allow Angustos Video Wall Controller chassis to set up flexible input / output slot.  
Hybrid I/O Slot can be both Input or Output slot



INPUT PORT



OUTPUT PORT



HYBRID I/O PORT



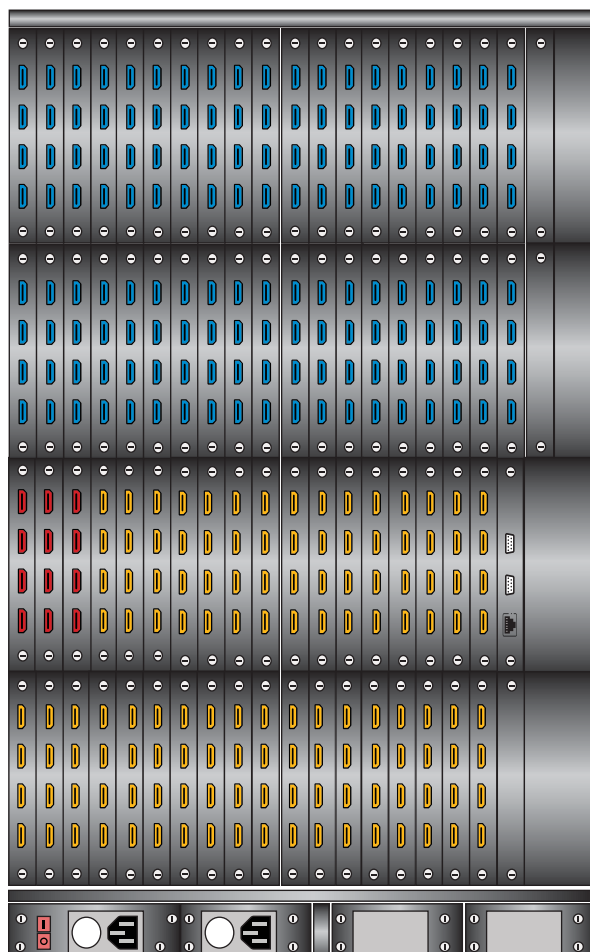
POWER MODULE



ETHERNET PORT

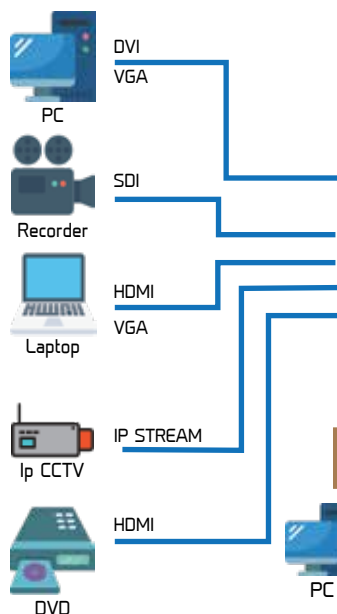


RS-232 PORT

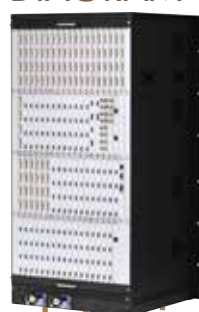


ACVW20-152144	MAX INPUT	MAX OUTPUT
INPUT PORT	164	152
OUTPUT PORT	132	144

### INPUT



### CONNECTION DIAGRAM



### CONTROL



### OUTPUT

