ANGUSTOS AVW3-1620_DataSheet_G1 Multiple Layers Fpga Videowall Controller Instruction Manual

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ANGUSTOS

ANGUSTOS AVW3-1620_DataSheet_G1 Multiple Layers Fpga Videowall Controller

Product Information

- The Angustos High-End Video Wall Controller is a high-performance video processing equipment with a hardware architecture design. It eliminates the need for high-end computer specifications, GPU cards, licenses, and reduces the risk of blue-screen OS crashes, viruses, and ransomware attacks. The controller supports up to 152 inputs and 144 outputs, making it suitable for large-scale video wall setups.
- The controller features a dedicated Field Programmable Gate Array (FPGA) chipset specifically designed for video processing. This eliminates the limitations of conventional software or PCcontrollers that rely on CPUs or GPUs. The FPGA chipset allows for independent operation of each FPGA chip, enabling users to replace or add new input/output cards without turning off the entire chassis.
- The modular design of the controller supports various connection options, including HDMI, DVI, VGA, HDBaseT, and IP streaming. This flexibility allows clients to customize their system to fit their specific requirements. The controller also reduces the total cost of investment by simplifying the expansion process and supporting control of multiple video walls.
- Additional features include support for high-end Multi Layers MPiPTM (Matrix Picture in Picture) with up to 2 layers per screen,easy control with drag and drop functionality for complex layouts, overlapping, roaming, stretching, zooming in/out of video wall content, front panel touch screen for scene mode control, profile saving/recalling, and IP setting configuration.
- The controller also supports IP camera direct streaming, background images, scrolling text, scheduling, and signal preview. It has a pure hardware structure with FPGA technology, seamless switching with auto EDID detection, bezel compensation with scaler, and optional features such as scrolling text, character superimposition, redundant power supply, and more.
- The chassis size is 3U, measuring 440 x 350 x 133 mm. It supports HDCP EDID 1.3/1.4/2.2 auto-program, a maximum data rate of 15.2 Gbps, and various input/output interface ports including VGA, CVBS, YPbPR, SDI, IP HDBaseT, DVI, DP, and HDMI. The controller can handle resolutions up to 1920 x 1200 @ 60 Hz -8 Bit RGBA for input and output, and supports multiple layers of content. It operates on a power supply of 100 ~ 240V, 50-60 Hz.
- The control options include IP, RS-232, and touchscreen (optional), and the operating temperature range is -20oC to +70oC with a humidity range of 10% to 90%.

Product Usage Instructions

1. Connect the Angustos High-End Video Wall Controller to the desired display screens using the appropriate input/output interface ports such as VGA, DVI, HDMI, etc.

2. Ensure that the power supply is connected and the controller is powered on.
3. Use the front panel touch screen or the IP/RS-232 control options to configure the desired scene mode, save/recall profiles, and set IP settings.
4. To create a video wall layout, use the drag and drop functionality by clicking on the desired content and placing it in the desired position on the screen.
5. Customize complex layouts by overlapping, roaming, stretching, zooming in/out of video wall content as needed.
6. If using IP cameras, ensure that the IP input card is properly connected to the controller and configure the settings to support streaming video feed directly from the IP CCTV cameras.
7. If desired, add background images or scrolling text to the video wall by configuring the settings accordingly.
8. Utilize the scheduling feature to set scene mode cycles for advertising or digital signage purposes.
9. Preview the signal to ensure it is displayed correctly on the video wall (optional).
10. For advanced users, take advantage of additional features such as character superimposition, redundant power supply, and more.

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

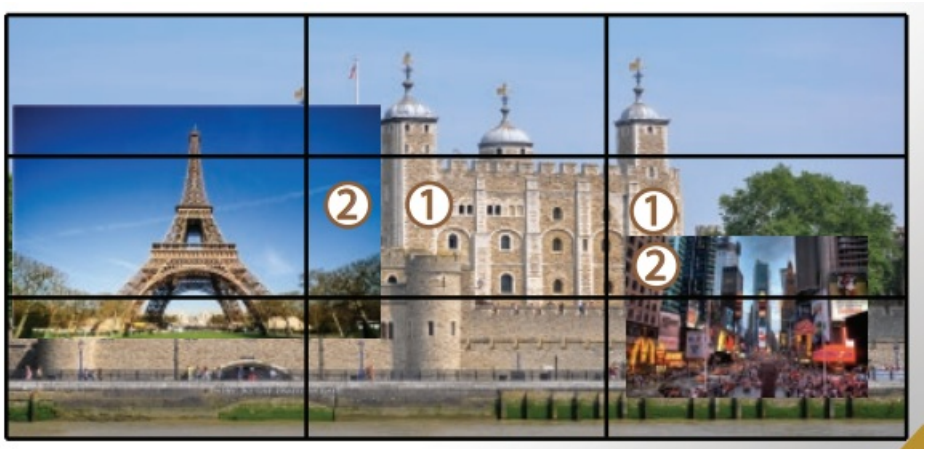
- Dedicated Field Programmable Gate Arrray (FPGA) chipset is a combination of processing unit that dedicated in video processing. This eliminated the limitation of a CPU or a GPU from conventional Software or PC controller.
- Without the use of PCI – Express card, the unit can work flawlessly when adding 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



Features

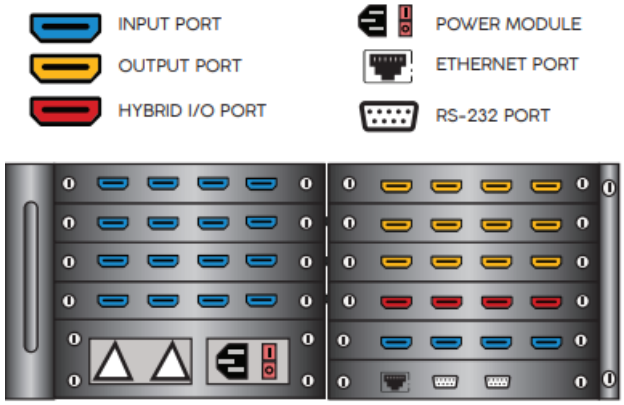
- Pure Hardware Structure – FPGA
- Modular Design – Hot swap
- Seamless Switching – Auto EDID
- Bezel Compensation with Scaler
- Scrolling Text (Optional)
- Character Superimposition
- Background Image (Optional)
- Multiple video wall management
- Signal preview (Optional)
- Support Redundant Power Supply (Opt)

SPECIFICATION

Chassis size	3U | 440 x 350 x 133 mm
Max. Data Rate	15.2 Gbps (3.8Gbps per Lane)
Input Interface Port	4 - 24
Output Interface Port	4 - 20
Interface Support	VGA / CVBS / YPbPR / SDI / IP
	HDBaseT / DVI / DP / HDMI
Control	IP / RS-232 / Touchscreen (Option)
HDCP	Support 1.3 / 1.4 / 2.2
EDID	Auto - Program
Resolution Input	1920 x 1200 @ 60 Hz -8 Bit RGBA
	4092 x 2160 @ 30Hz-8 Bit RGBA
Resolution Output	1920 x 1200 @ 60 Hz-8 Bit RGBA
Multiple Layers	Support - 2 Layers MPiP™
Power Supply	100 ~ 240V, 50-60 Hz
Temp / Humid	-20°C ~ + 70°C / 10% ~ 90%

HYBRID I/O SLOT

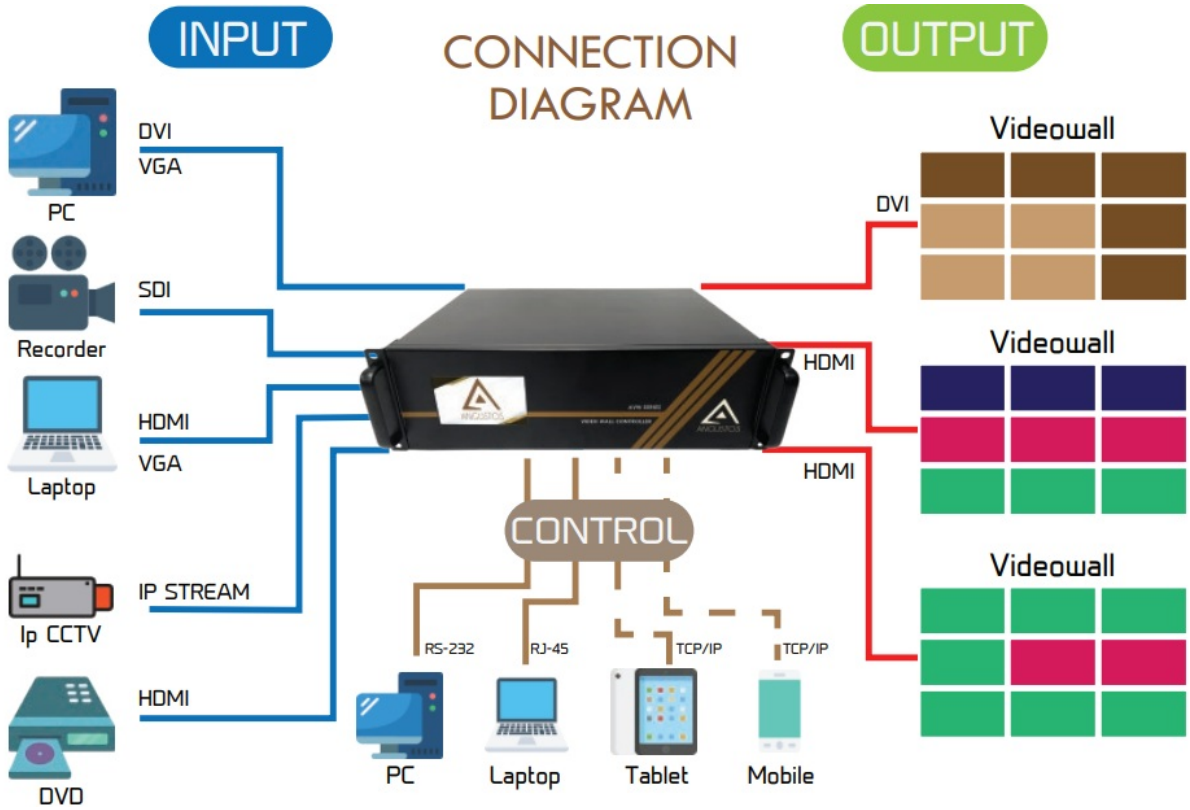
Advance FPGA chip allow Angustos Video Wall Controller chassis to set up flexible input / output slot. Hybrid I/O Slot can be both Input or Output slot



ACVW3-162O : 3U chassis

ACVW3-162O	MAX INPUT	MAX OUTPUT
INPUT PORT	24	16
OUTPUT PORT	12	20

WIRING DIAGRAM



ABOUT COMPANY

- **Website:** http://www.angustos.com
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Documents / Resources

	ANGUSTOS AVW3-1620_DataSheet_G1 Multiple Layers Fpga Videowall Controller [pdf] Instruction Manual AVW3-1620_DataSheet_G1, AVW3-1620_DataSheet_G1 Multiple Layers Fpga Videowall Controller, Multiple Layers Fpga Videowall Controller, Fpga Videowall Controller, Videowall Controller, Controller

References

- ANGUSTOS - The Best Selling IT & Pro AV in USA Market!