

4K - UHD

Video Wall Controller



4K-UHD 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 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 144 input x 72 output.★



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 to customize their system.

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 integration.

Reduce total cost of investment in both pre/post phase of expansion. Chassis also support control over Remote control, TCP/IP, RS-232 & button, further simplify the complexity of connections and management.

Features

● Front Panel touch screen

Control scene mode, save / recall profile (up to 32), IP setting with touch

● Modular design - Mix and Match

8 x 4 up to 144 x 72 (input x output) with mixing ports

● Easy control with Drag & Drop

Customize complex layout with simple Click - Drag - Drop

● 4K Video Wall with Flexible set up

Support DVI-I / HDMI / 3G-SDI / HDBaseT / VGA

Support resolution up to 4K@60Hz for both input / output (HDMI 2.0b)

● Seamless Switching

5ms seamless switching between signal sources. No blank or flicker.

● Specialized video setting - Quatro Vision 2.0™

2 up to 4 video sources (layers) in each display. Preset (Scene) schedule

● Audio Channel

HDMI / SDI / HDBase-T ports support embedded (de-embedded) audio

● Advance Matrix / Videowall controller

Auto detect input status, controller status, EDID management, redundant power supply (OPT)

Stretching / Slicing / Scaling / Roaming / MPiP™ features supported

Full-HD /4K HDMI I/O Card



DVI I/O Card



HDBase-T I/O Card



VGA / YPbPr I/O Card



SDI I/O Card



Fiber Input/Output I/O



VIDEO WALL CONTROLLER with SEAMLESS - AMK4 Series 72 x 36 QUATRO VISION v.2 - 4K@60Hz Video Wall

FEATURES

- Pure Hardware Structure - FPGA.
- Modular Design with multiple I/O cards
- Seamless Switching - Smart EDID.
- 18Gbps video bandwidth (HDMI-Fiber)
- Flexible output resolution with Text OSD
- RS-232 control support (IN & OUT)
- Easy manage with TCP/IP.
- Drag & Drop with 32 Preset support
- HDMI 2.0b / HDCP 2.2 / Audio embedded
- Quatro Vision v.2™ - 4 sources per display*
- Support redundant power supply (opt)
- Multiple Videowall - Up to 4 (LCD/LED)
- Support IP stream decode with H.264/H.265



SPECIFICATION

Start up time	10s
Switching time	5ms
Chassis size (mm)	11U 440 x 350 x 490mm
Max Data Rate	18 Gbps (max)
Input Interface Port	1 - 72
Output Interface Port	1 - 36
Interface Support (Input / Output)	VGA / 3G-SDI / HDMI HDBase-T / DVI / CVBS
Control	TCP-IP (RJ-45) x 2 / Front Button RS-232 in & out / WEB GUI
HDMI version	1.4 - 3D, Deep Color/ 2.0b with 4K cards*
HDCP version	1.4 / 2.0 / 2.2
Distant support	3-300m with AOC cables / Extenders
Resolution Input / Output (8 Bit RGBA color)	1280 x 720 @ 120Hz 1920 x 1080 @ 60Hz 1920 x 1200 @ 60Hz 4096 x 2160 @ 30Hz / 60Hz (4:4:4)
Software Language	English / Chinese

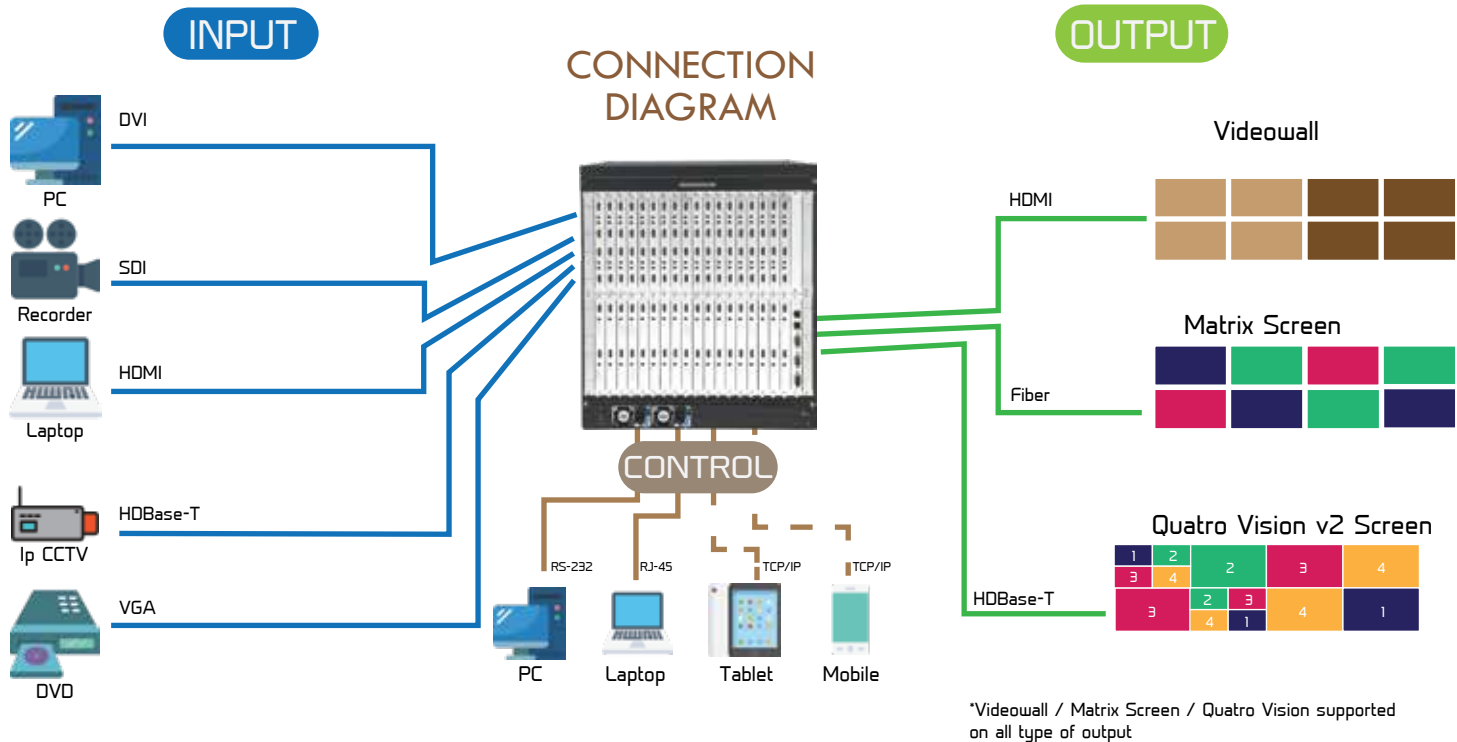
Processing chipset	FPGA - Tritium™ 2 nd gen
Screen signal - Layers	2/4 signal Quatro Vision 2.0™
Hot-swap EDID	Support Auto/ Smart EDID
Power supply	Main - Support Redundant (OPT)
Interface link	Analog - Digital
Output restriction	Support all type of display (Screens / Projectors / DLP / LED)
MTBF	60,000 hours with 24/7 operation
Pixel Clock	225 Mhz
HDMI impedance	100 Ω - ESD Protection
Power Rating	100-240 VAC; 50/60Hz
Power Consumption	100 - 450 W
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)

*Contact ANGUSTOS Technician if you need more information.

*HDMI 2.0b is supported when connect to 4K HDMI / 4K DP / 4K Fiber input and output cards.

*When using 4 sources MPiP™ on Quatro Vision v.2 output, the channel bandwidth is reduced in **half**, duplicate output signals on adjacent ports expected.

VIDEO WALL CONTROLLER with SEAMLESS - AMK4 Series 72 x 36 QUATRO VISION v.2 - 4K@60Hz Video Wall



I/O CARD SPECIFICATION

Model	AMK4-CO-2HK	AMK4-CO-2FK	AMK4-CI-4S	AMK4-CI-4V	AMK4-CI-4C	AMK4-CI-4IP
Interface	HDMI x 2	Optical Fiber x 2 (LC)	BNC x 4	DB-15 x 4	BNC x 4	RJ-45 x 2
Audio Interface (x4)	3.5mm Terminal	3.5mm Terminal	3.5mm Terminal	3.5mm Terminal	3.5mm Terminal	
HDMI Version	HDMI 2.0b		HD-SDI / 3G-SD	VGA	CVBS	IP Stream
Max. data rate	18Gbps	18Gbps	SMPTE	200Mhz	10.2Gbps	10.2Gbps
Resolution	4096x2160@60Hz (4:4:4)	4096x2160@60Hz (4:4:4)	1920x1080@60Hz	1920x1200@60Hz	1920x1200@60Hz	1080p
HDCP	HDCP 2.2		259M/292M/424M			H.264/H.265

Model	AMK4-CI-4HK	AMK4-CI-4DP	AMK4-CI-4F	AMK4-CI-4H	AMK4-CI-4D	AMK4-CI-4HB10	AMK4-CI-4HB7
Interface	HDMI x 4	Display Port x 4	Optical Fiber x 2 (LC)	HDMI x 4	DVI-I x 4	HDBase-T (RJ-45) X 4	HDBase-T (RJ-45) X 4
Audio Interface (x4)	3.5mm Terminal	3.5mm Terminal	3.5mm Terminal	3.5mm Terminal	3.5mm Terminal	3.5mm Terminal	3.5mm Terminal
HDMI Version	HDMI 2.0b	DP 1.2		HDMI 1.4b	DVI 1.1	HDMI 1.4b	HDMI 1.4b
Max. data rate	18Gbps	18Gbps	18Gbps	10.2Gbps	3.96Gbps	10.2Gbps (100m)	10.2Gbps (70m)
Resolution	4K@60Hz (4:4:4)	4K@60Hz (4:4:4)	4K@60Hz (4:4:4)	4K@30Hz	1920x1200@60Hz	4K@30Hz (4:4:4)	4K@30Hz (4:4:4)
HDCP	HDCP 2.2	HDCP 2.2		HDCP 2.2		HDCP 1.4	HDCP 1.4