

# AVCIT DSII Node

## Intuitive Video Wall Control System over IP



DSII-DD



DSII-IN-4K(d)



DSII-HH



DSII-OUT-4K

### What's New?

AVCIT IP Based virtual Video Wall Matrix System provides intuitive & Command Center Solutions, which is combined functions of LED/DLP/LCD Video Wall Controller, video matrix and environment control. Compared to conventional command center solution by video wall matrix, features of AVCIT AV over IP:

- ✓ No standalone LED/LCD Wall Controller required
- ✓ Realized 4:4:4 image chroma over 20 Mbps H.265 streams
- ✓ Great image sync for LCD display and LED sending box with irregular resolution(**Exclusive**)

AVCIT DSII node is compact video encoder for FHD/4K video source, and decoder for standalone display, single monitor of a LCD video wall, or LED sending box of a Unilumin/Leyard LED wall; It is designed to transmit FHD/4K video over standard Gigabit Ethernet with low latency and high image quality;

The unique H.265 algorithm by AVCIT, realized extraordinary chroma of 4:4:4, over low-bitrate (4~20Mbps) streams, which is significant for information sharing and collaborating among multiple control rooms in multiple locations.

Benefiting from its no-server architecture, any single encoder/decoder's bug will not affect the entire system, It will surely add much value on your design of mission critical command & control center.

### Features of DSIII/DSII Node

Both 2K and 4K DSII node have HDMI/DVI/VGA input and output port, bi-directional RS232/IR/IO port. User can have a visualized & Intuitive experience touch control on iOS+Win10 control tablet, by simply drag/drop/zoom in/out by mouse & finger dragging.

- ✓ No centralized video wall processor/server require-ed(**Exclusive**)
- ✓ Realized 4:4:4 image chroma over 20 Mbps H.265 streams(**Exclusive**)
- ✓ No limit on the channels of input and outputs to video wall display
- ✓ Built-in video wall processor for LCD display and LED sending box, up to 16 FHD PIP/POP on single display

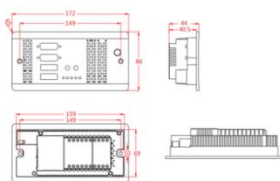
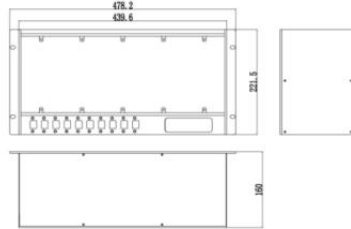
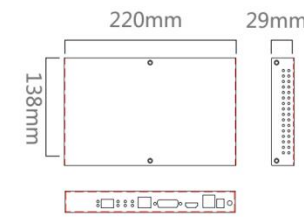
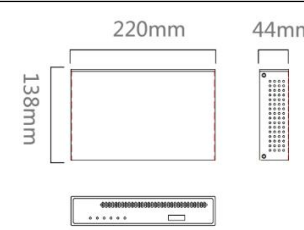



- ✓ Great performance of image sync for LCD display and LED sending box with irregular resolution(Exclusive)
- ✓ Visualized drag/drop control by mouse & finger
- ✓ Recall custom-made video wall scenario/layout seamlessly(Exclusive)
- ✓ Annotation features by touch or pen(Exclusive)
- ✓ Layout-preview and one button sync feature(Exclusive)
- ✓ Real-time preview of content on iOS/Window control tablet
- ✓ Layout Preview-send Mode on control tablet(Exclusive)
- ✓ Sources manager feature on control tablet(Exclusive)
- ✓ Scheduled sources playing on control tablet(Exclusive)
- ✓ Contents on video wall A can be duplicated to video wall B and C(Exclusive)
- ✓ Favorite folder feature on control tablet(Exclusive)
- ✓ Native capability to decode 3<sup>rd</sup> party RTSP steams
- ✓ Compatible with 3<sup>rd</sup> party CCTV server(Exclusive)
- ✓ Both C/S and B/S Architecture based control UI are available(Exclusive)
- ✓ Operating & Maintenance system with User-friendly and Intuitively Interface to monitor system's health and manage all the devices. (Exclusive)
- ✓ Soft KVM features on Window OS control UI(Exclusive)
- ✓ Support 8K signals input from workstations which is with multiple graphic card, perfect image sync(Exclusive)
- ✓ Build-in audio mixer up to 16 channel(Exclusive)
- ✓ 1080p+UDP+USB+RS232/RS485/IR over CAT6e, up to 90m

Technical Specification

Interface Port						
Item	DSII 2K Version			DSII 4K Version		
Type	Encoder + Decoder 2-in-1			Encoder		Decoder
Model#	DSII-HH	DSII-DD	DSII-VD	DSII-IN-4K	DSII-IN-4Kd	DSII-OUT-4K
Video Input	HDMI	DVI-D	DVI-I	2 x HDMI	1 x HDMI, 1 x DisplayPort	NA
Video Output	HDMI	DVI-I	DVI-I	NA	1 x HDMI loop out	HDMI+DVI+VGA
USB	NA			NA	NA	NA
RS232	1			1	1	1
RS485	1			1	1	1
IR & I/O	Totally 3			Totally 3	Totally 3	3 x IR, 3 x I/O
Audio	3.5mm jack 1 in +1 out			1 in +1 out	1 in +1 out	1 in +1 out
SFP(Optic)	NA			Optional	Optional	Optional
Power Adapter	5V3A (Optional)					
LAN(POE)	1					
Technical Parameters						
Video Compression	H.265/264					
Video Resolutions	Up to 3840x2160					
Streaming Protocol	RTSP					
Bit Rates	Configurable 4-20Mbps per streams					
Copy Protection	HDCP 1.4, 3DES					
Latency	Up to 31ms					



Power Consumption	15-30W		
Requirement of Ethernet Switch			
Switching Capacity	≥ 598Gbps(more than 40 node)		
Forwarding Performance	≥ 222Mpps(more than 40 node)		
POE Feature	Required(or choose 3 <sup>rd</sup> party POE injector)		
Recommend Model	HUAWEI S5730-48C-PWR-SI-AC, and max 3-4pcs to stack, for project that need more than 192 node, please use Core Switch, i.e. HUAWEI S6720S-26Q-EI-24S-AC or S6720-32C-SI-AC		
Physical Parameters			
DSII 2K Version	✓ DSII-HH ✓ DSII-DD ✓ DSII-DV		Dimension of node: 172x86x44mm NW: 0.5kg/node Carton of node: 205x195x85mm
	5U Rack Mount Kit(Each rack mount kit can install 10 node		Dimension of kit: 478x160x221mm NW: 2.5kg/kit Carton of kit: 540x400x250mm
DSII 4K Version	✓ DSII-IN-4K(d)		Dimension of node: 220x138x29mm NW: 0.7kg/node Carton of node: 285x220x120mm
	✓ DSII-OUT-4K		
		2/3U Rack Mount Ear	

System Topology

