

# Control Room and Video Wall System

## All-in-one IP Based, KVM and Video Wall Processor System



LD-VWCN\_DVI\_O



LD-VWCN\_HDMI\_I\_KVM



LD-VWCN\_HDMI\_O



LD-VWCN\_HDMI\_O\_KVM

### Powerful All-In-One Command Centre Solution

L Display IP Based & KVM System is an all-in-one command centre solution, which has combined functions of KVM, LED /DLP/LCD Wall Control, smart workspace and environment control. Compared to conventional command center solutions by video wall matrix, the key features of L Display AV over IP are:

- No standalone server required
- No standalone LED/LCD Wall Controller required
- No HDMI/KVM Extender required
- No Input Preview Card required to watch real-time content
- No limit on the channels of input and outputs to video wall display

The L Display VWCN 2K node is a compact video encoder/decoder for FHD video source or KVM sources; it is designed to transmit FHD video over standard Gigabit Ethernet with low latency and high image quality. A high-performance virtual video matrix, a virtual KVM matrix, or even an LED video wall processor (works with LED sending box from Unilumin/Leyard/Absen) can be configured over IP. It is a fully distributed and decentralised AV&KVM over IP solutions. Benefiting from its no-server design, any single encoder/decoder's bug will not affect the entire system. It's a high performance solution for mission critical command & control centres.

### Features of VWCN Nodes

VWCN KVM node is a KVM encoder for KVM sources (i.e. dedicated workstations, servers, thin clients terminals), or decoder for operator's monitor at workspace.

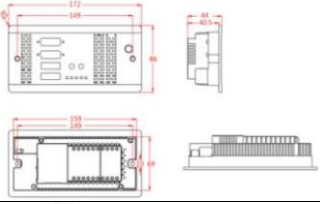
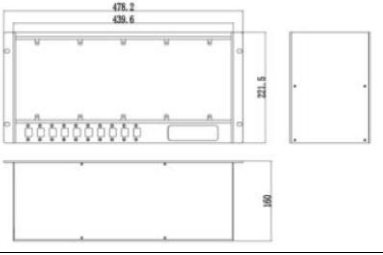
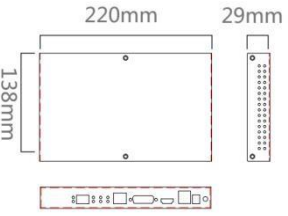

VWCN - O node is video encoder for video source, and decoder for standalone display, single monitor of a LCD video wall, or LED sending box of a Unilumin/Leyard LED wall.

- Push any remotely accessed content to video wall by hot key seamlessly (VWCN KVM only)
- 4 permissions levels available for operators: EXCLUSIVE, SHARE, VIEW ONLY and PRIVATE(VWCN KVM only)
- Cross Display Switching features (VWCN KVM only)
- Connect multiple content channels, operator display or video wall
- Built-in LED/LCD video wall processor
- Visualised drag/drop control by mouse & finger
- Recall custom-made video wall scenario/layout seamlessly
- Real-time preview of content on iOS/Window control tablet
- Mouse latency up to 31ms

- Layout preview-send code on control tablet
- Sources manager feature on control tablet
- Scheduled sources playing on control tablet
- Favorite folder feature on control tablet
- Native capability to decode 3rd party RTSP streams
- Soft KVM features on Window OS control tablet
- 1080p+UDP+USB+RS232/RS485/IR over CAT6e, up to 90m

## Technical Specification

Interface Port					
Item	LD-VWCN_KVM			LD-VWCN_O	
Codec Design	NO			YES	
Model#	VWCN_HDMI_I_KVM	VWCN_DVI_I_KVM	VWCN_HDMI_DVI_O_KVM	VWCN_HDMI_O	VWCN_DVI_O
Video Input	HDMI	DVI-D		HDMI	DVI-D/I (Specify)
Video Output	HDMI loop		DVI + HDMI	HDMI	DVI-I
USB	1 x USB		2 x USB	No	
RS232	1			1	
RS485	1			1	
IR & I/O	Totally 3			Totally 3	
Audio	1 in +1 out		1 out	3.5mm jack 1 in +1 out	
Fiber	SFP Duplex LC Connectors(Optional)			N	
Power Adapter	5V3A (Optional)			5V3A (Optional)	
Ethernet	RJ45			RJ45	
Technical Parameters					
Video Compression	H.264				
Video Resolutions	Up to 1920x1200				
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 S5720S-28P-SI-AC, S5720-36C-PWR-EI-AC, S5700-48TP-PWR-SI, S5720-56C-PWR-HI, and max 3-4pcs S5720-56C-PWR-HI to stack, for projects 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			
LD-VWCN_O	Dimension/NW of node		172x86x44mm 0.5kg/node
	5U Rack Mount Kit		478x160x221mm Each rack mount kit can install 10 node 2.5kg/kit
	Carton of node	205x195x85mm per node	
LD-VWCN_KVM	Dimension/NW of node		220x138x29mm 0.7kg/node
	2/3U Rack Mount Ear		
	Carton of node	285x220x120mm per node	

## System Topology

