DS-B31-16H32H/UHK
16-Channel HDMI Input+32-Channel HDMI Output

Designed with reference to the Advanced Telecommunications Computing Architecture (ATCA), the Multi-Functional Video Center (hereinafter referred to as the device) supports matrix switching of analog and digital videos, video encoding and decoding, and network real-time preview. It integrates image processing, network functions, log management and device maintenance, simplifies the installation, maintenance and the whole system, Integrated high-capacity bandwidth switching system and PCI-E interface, and has good compatibility and expandability. Thus, the device can be widely used in various video system and command control system.

- Adopts the 3 U standard rackmount chassis and ATCA chassis system for small to medium-sized surveillance.
- Adopts the plug-in modular design to provide flexible choice of model according to needs.
- Supports auto temperature adjustment of the intelligent fan to ensure system stability and reliability.
- Supports HDMI signal input and output.
- Independent color depth selection.
- Supports the default H.265 encoding and H.264 encoding.
- Supports H.265, H.264, MJPEG and other mainstream encoding formats.
- Supports 16 channels of HD video encoding.
- Supports 256 channels of HD video decoding.
- Supports the maximum LED loading capacity of 2.6 MP per port.
- Supports 32 MP HD video decoding.
- Supports any splicing of 32 screens according to needs.
- Supports the division of 1, 4, 6, 8, 9, 16, and 25 per output port window.
- Supports opening a maximum of 512 windows on the video walls, opening a maximum of four 1080p layers or two 4K layers on a single screen, and floating windows.
- Supports live view of video wall.
- Supports up to 128 scenes. You can customize the video wall layout and save it as a scene.
- Supports up to 8 subtitles for the video wall controller and up to 3 subtitles for one video wall.
- Supports the access and operation via the mobile client (Android or iOS), PC client, and web client.
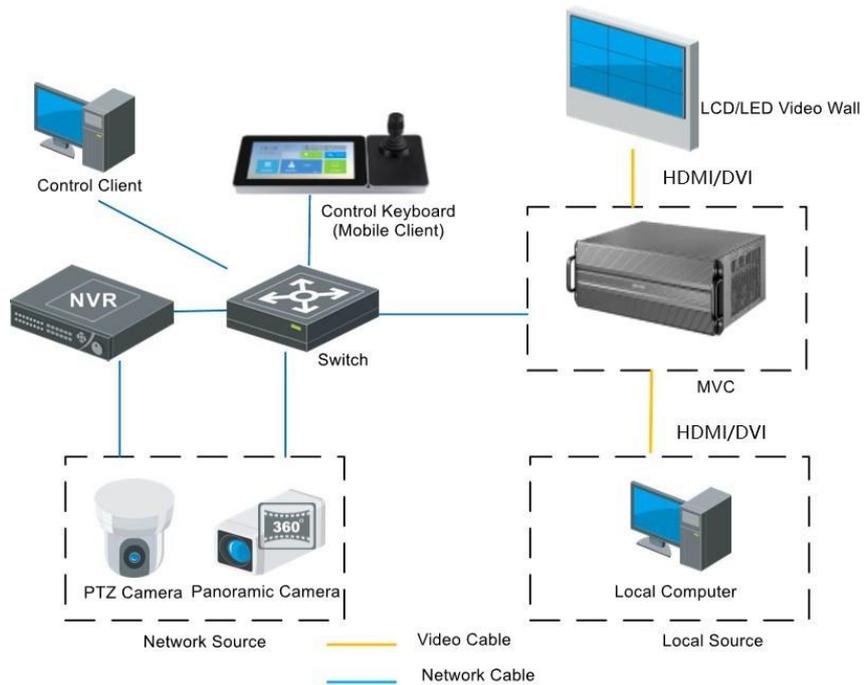- Support using the ONVIF protocol to access devices for decoding.

▪ Specification

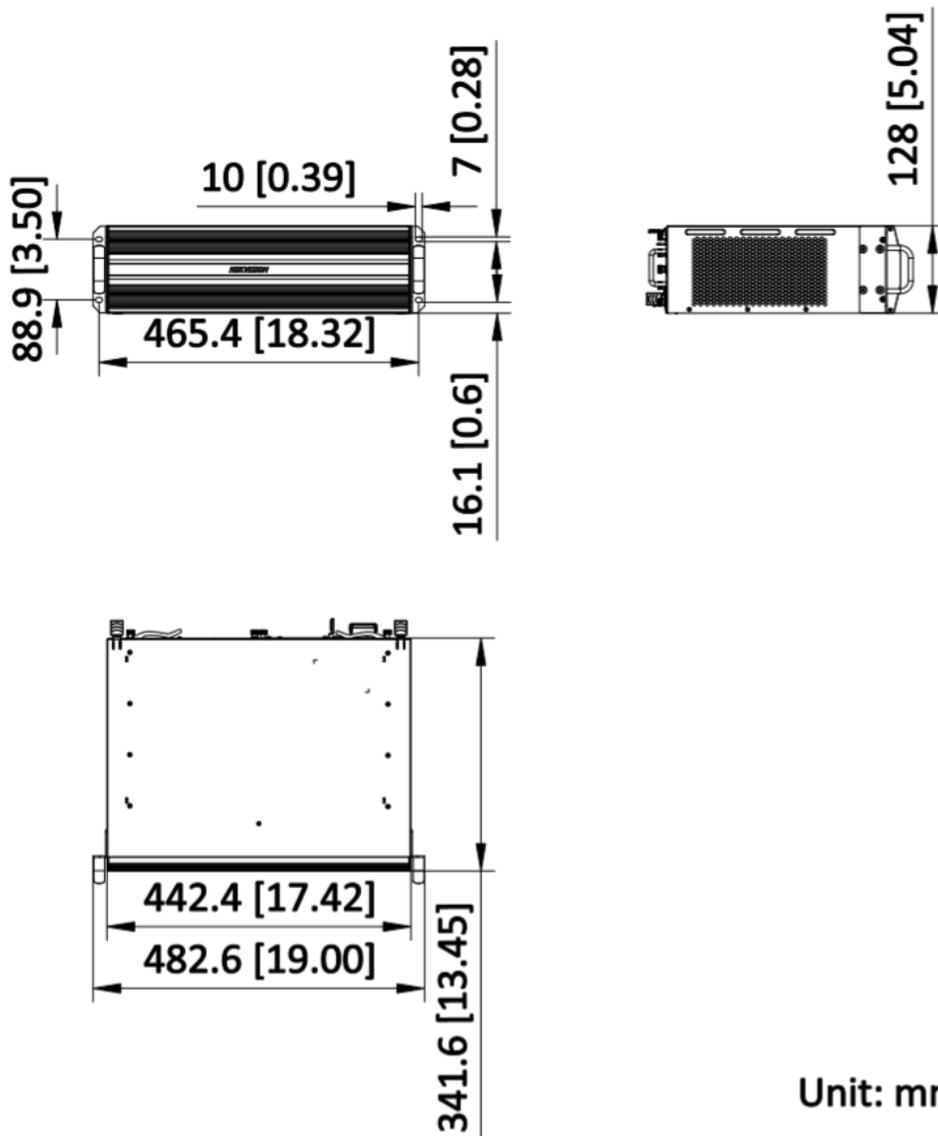| Chassis	
Chassis Height	3 U
Bus Type	Gigabit network switching
Main Control Board Slot	1
Installed Main Control Boards	1
Power Supply Slot	2
Installed Power Supplies	1
Service Board Slot	6
Installed Service Boards	6
Fans	14 (2 fan boards, 7 fans per fan board)
Interface	
USB Interface	2 × USB 2.0
Serial Interface	1 × Console port (RJ-45) + 1 × reserved port for debugging + 4 × RS-232/multiplex ports (RJ-45) + 2 x RS-485
Power	
Power Interface	100 to 240 VAC, 50/60 Hz
Device Consumption	≤ 300 W
Network	
Network Interface	2 × 10/100/1000 Mbps self-adaptive Ethernet interface (RJ-45)
Video Wall	
Video Walls	8
Video Wall Scale	≤ 80
Open Windows	512
Window Division per Output Port	1/4/6/8/9/16/25
Input Source Copy Capability	Supported
Layers Per Port	4 × 1080p or 2 × 4K
Layers per Device	128
Scenes	128
Display Video Wall Image	Supported
Scene Auto-Switch Delay	3 s
Preview Channels	2
Live View Resolution	CIF(352 × 288)/QCIF(176 × 144)/HCIF(704 × 288)/DCIF(528 × 384)/FCIF(704 × 576)
Background Image	≤ 8, single background image resolution: 1280 × 720 to 7680 × 4320, background image format: JGP/JPEG.
Subtitles	≤ 8 subtitles on the video walls; ≤ 3 subtitles on a single video wall
Input Image Clipping	Supported, 200 pixels on the left, right, top and bottom edges.
Local Signal Source Decoding Delay	120 ms
General	
Working Temperature	0 °C to 50 °C
Working Humidity	10% to 90%
Net Weight	≤ 9.4 kg (20.72 lb.)
Gross Weight	≤ 18 kg (39.68 lb.)
Dimensions (W × H × D)	442.4 mm × 128 mm × 341.6 mm (17.42 inch × 5.04 inch × 13.45 inch)

Packing List	1 × serial port cable, 1 × AC power cord, 1 × grounding cable, 1 × M4 screw, 1 × HDMI bracket, several HDMI snap fittings, 1 × regulatory compliance and safety information manual
Audio Input	
Audio Input Interfaces	16
Audio Input Interface Type	HDMI embedded
Video Input	
Video Input Resolution	1024 × 768@60 Hz, 1280 × 1024@60 Hz, 1366 × 768@60 Hz, 1440 × 900@60 Hz, 1680 × 1050@60 Hz, 1280 × 960@60 Hz, 1600 × 1200@60 Hz, 1280 × 720p@50 Hz, 1280 × 720p@60 Hz, 1920 × 1080p@50 Hz, 1920 × 1080p@60 Hz, 1920 × 1200@60 Hz, 3840 × 2160@30 Hz (only odd-numbered ports) Supports custom resolution. Width: 800 to 1920, pixel alignment: must be a multiple of 4 Height: 600 to 1200, pixel alignment: must be a multiple of 2 Resolution: 0.48 MP to 2.3 MP
Video Input Interface Type	HDMI 1.4
Max. Video Input Resolution	4K (Only odd-numbered ports)
Video Input Interfaces	16
Video Encoding	
Video Encoding Channels	16
Video Encoding Format	H.265 (default), H.264
Video Encoding Capability	16 channels of 1080p 60 fps or 8 channels of 4K30
Audio Encoding	
Audio Encoding Format	G722.1,G711_U,G711_A,AAC
Video Output	
Video Output Interface Type	HDMI 1.4
Video Output Interfaces	32
Max. Video Output Resolution	4K
Video Output Resolution	XGA_60 Hz(1024 × 768@60 Hz)/SXGA_60 Hz(1280 × 1024@60 Hz)/ 720P_60 Hz(1280 × 720@60 Hz)/UXGA_60 Hz(1600 × 1200@60 Hz)/ WSXGA_60 Hz(1680 × 1050@60 Hz)/WUXGA_60 Hz(1920 × 1200@60 Hz)/ 1080P_60 Hz(1920 × 1080@60 Hz)/4K_30 Hz(3840 × 2160@30 Hz)
Loading Capacity for Video Output to LED	Single port load 2600000, Width 288 - 3840, Height 288 - 2160, Width must be a multiple of 2 and height must be a multiple of 2
Video Decoding	
Video Decoding Format	H.264, H.265, Smart264, Smart265, MJPEG
Video Decoding Channels	512
Video Decoding Capability	H.264/H.265/Smart264/Smart265 format: 16 channels of 32 MP/24 MP, 32 channels of 16 MP, 48 channels of 12 MP, 64 channels of 8 MP, 80 channels of 6 MP, 128 channels of 4 MP, 256 channels of 1080p, or 512 channels of 720p/D1 or lower resolution (One group of 4 outputs shares decoding capability) MJPEG format: 32 channels of 2 MP
Audio Output	
Audio Output Interfaces	32

Audio Output Interface	HDMI embedded
Audio Decoding	
Audio Decoding Format	G711-A, G711-U, G722.1, G726-16/U/A, MPG, AAC-LC
Device Parameters	
Device Decoding Capability	256 channels of 1080p 30 fps
Device Splicing Capability	32 channels
OS	Linux based

▪ Typical Application

▪**Dimension**

10 [0.39] 7 [0.28] 128 [5.04]

88.9 [3.50]

465.4 [18.32]

16.1 [0.6]

442.4 [17.42]

482.6 [19.00]

341.6 [13.45]

Unit: mm [inch]

See Far, Go Further

HIKVISION