

**DS-B31-12H24H****12-Channel HDMI Input+24-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, 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.
- Supports the default H.265 encoding and H.264 encoding.
- Supports H.265, H.264, MJPEG and other mainstream encoding formats.
- Supports 12 channels of HD video encoding.
- Supports 192 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 24 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 384 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.

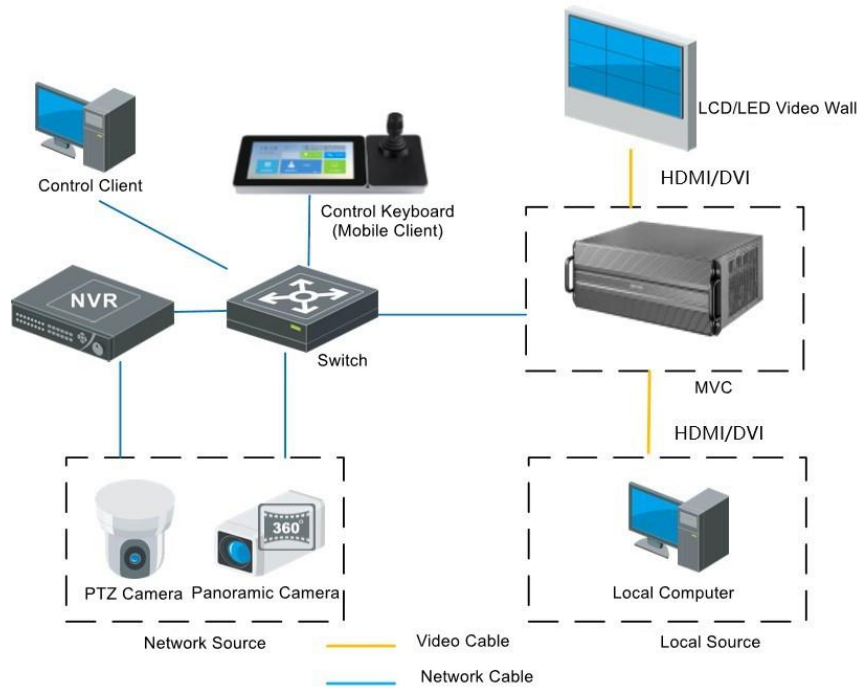
## ▪ Specification

<b>Chassis</b>	
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	4
Fans	14 (2 fan boards, 7 fans per fan board)
<b>Interface</b>	
USB Interface	2 × USB 2.0
Serial Interface	1 × Console port (RJ-45) + 1 × reserved port for debugging + 2 × RS-485/RS-232 multiplex ports (RJ-45)
<b>Power</b>	
Power Interface	100 to 240 VAC, 50/60 Hz
Device Consumption	≤ 240 W
<b>Network</b>	
Network Interface	2 × 10/100/1000 Mbps self-adaptive Ethernet interface (RJ-45)
<b>Video Wall</b>	
Video Walls	8
Video Wall Scale	≤ 24
Open Windows	384
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	96
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
<b>General</b>	
Working Temperature	0 °C to 50 °C
Working Humidity	10% to 90%
Net Weight	≤ 8.5 kg (18.74 lb.)
Gross Weight	≤ 16.7 kg (36.82 lb.)
Dimensions (W × H × D)	442.4 mm × 128 mm × 341.6 mm (17.42 inch × 5.04 inch × 13.45 inch)

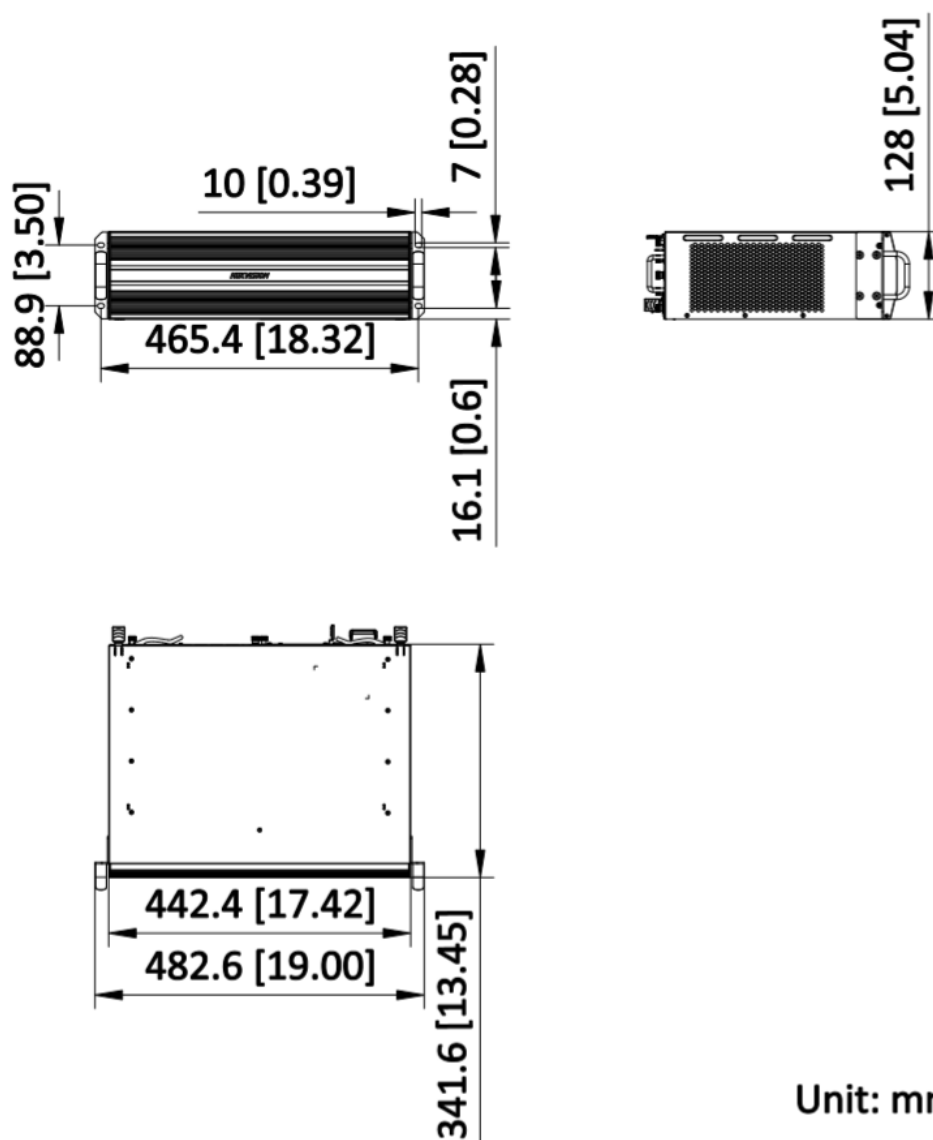
Packing List	1 × serial port cable, 1 × AC power cord, 1 × grounding cable, 1 × M4 screw, 1 × HDMI bracket, several HDMI snap fittings, 1 × regulatory compliance and safety information manual
<b>Audio Input</b>	
Audio Input Interfaces	12
Audio Input Interface Type	HDMI embedded
<b>Video Input</b>	
Video 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	12
<b>Video Encoding</b>	
Video Encoding Format	H.265 (default), H.264
Video Encoding Channels	12
Video Encoding Capability	12 channels 1080p 60 fps or 6 channels of 4K30
<b>Audio Encoding</b>	
Audio Encoding Format	G722.1,G711_U,G711_A,AAC
<b>Video Output</b>	
Video Output Interface Type	HDMI 1.4
Video Output Interfaces	24
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
<b>Video Decoding</b>	
Video Decoding Format	H.264, H.265, Smart264, Smart265, MJPEG
Video Decoding Channels	384
Video Decoding Capability	H.264/H.265/Smart264/Smart265 format: 12 channels of 32 MP/24 MP, 24 channels of 16 MP, 30 channels of 12 MP, 48 channels of 8 MP, 60 channels of 6 MP, 96 channels of 4 MP, 192 channels of 1080p, or 384 channels of 720p/D1 or lower resolution (One group of 4 outputs shares decoding capability) MJPEG format: 24 channels of 2 MP
<b>Audio Output</b>	
Audio Output Interfaces	24

Audio Output Interface	HDMI embedded
<b>Audio Decoding</b>	
Audio Decoding Format	G711-A, G711-U, G722.1, G726-16/U/A, MPG, AAC-LC
<b>Device Parameters</b>	
Device Decoding Capability	192 channels of 1080p 30 fps
Device Splicing Capability	24 channels

## ▪ Typical Application



▪ Dimension



Unit: mm [inch]

# See Far, Go Further



[www.hikvision.com](http://www.hikvision.com)  
[support@hikvision.com](mailto:support@hikvision.com)

