

## DS-B31-12H24H B31 all-in-one controller



- 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.264 encoding and H.265 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 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 384 windows on the video walls, opening a maximum of 3 layers on a single screen, and floating windows.
- Supports live view of video wall.
- Supports up to 128 preset scenes. The users can customize video wall layout of each scene.
  - Supports up to 8 subtitles on the video walls and up to 3 subtitle on a single 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
Device Decoding Capability	192 channels of 1080p 30 fps
Device Encoding Capability	12 channels of 1080p 60 fps
Device Splicing Capability	24 channels
Fan	14 (2 fan boards, 7 fans per fan board)
<b>Interface</b>	
USB Interface	2 × USB 2.0
<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 Screen	1/4/6/8/9/16/25
Input Source Copy Capability	Supported
Layers Per Screen	3 × 1080p or 2 × 4K
Layers per Device	72
Scenes	128
Signal Source Live View	Supported
Scene Auto-Switch Delay	3 s
Preview Channels	2
Preview 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.
Delay of Displaying Local Signal Source on Video Wall	120 ms
Delay of Displaying Decoded Signal Source on Video Wall	120 ms
<b>General</b>	
Working Temperature	0 °C to 50 °C
Working Humidity	10% to 90%

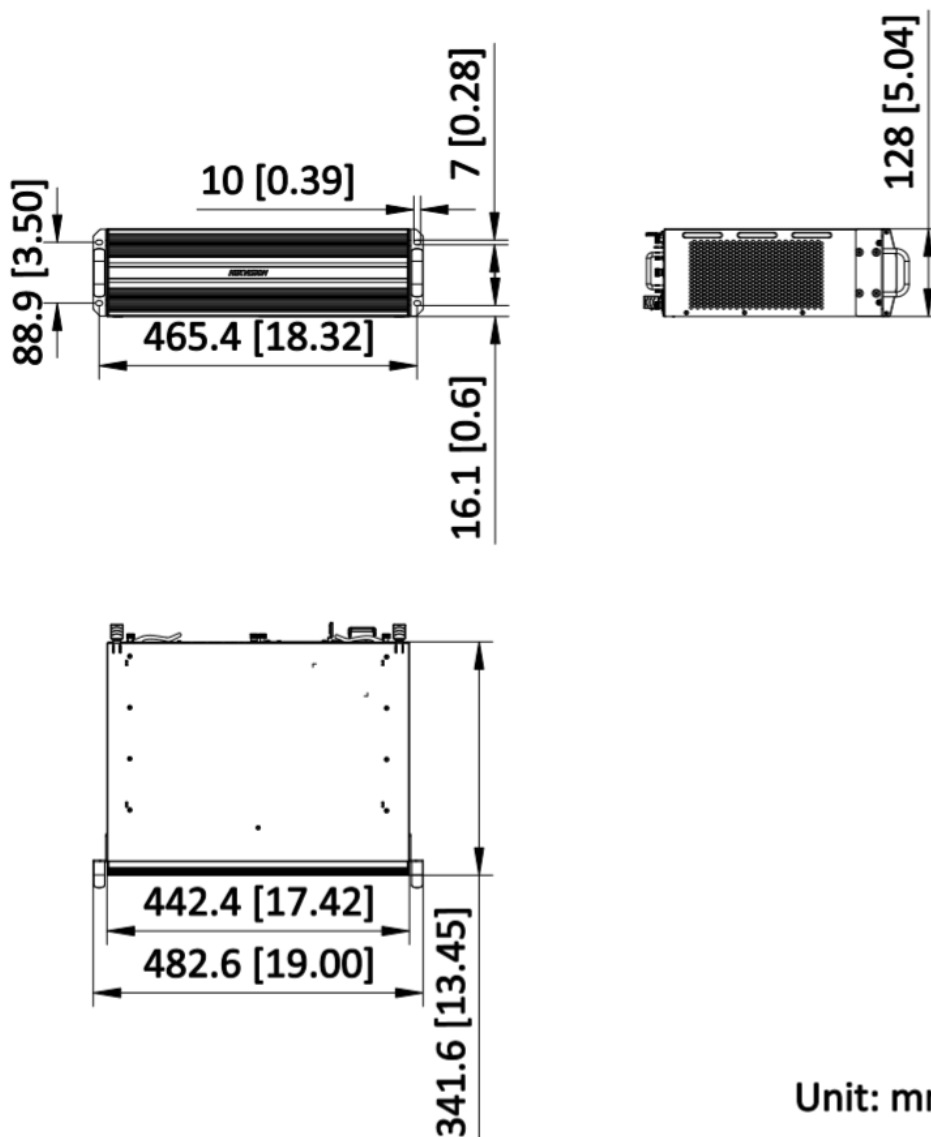
Net Weight	≤ 8.5 kg (18.74 lb.)
Gross Weight	≤ 16.7 kg (36.82 lb.)
Dimensions (W × H × D)	442.4 mm × 128 mm × 341.6 mm (17.42 inch × 5.04 inch × 13.45 inch)
Packing List	1 × serial port cable, 1 × AC power cord, 1 × power supply, 1 × grounding cable, 1 × M4 screw, 1 × HDMI bracket, several HDMI snap 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) Support custom input resolution, width and height range from 800 × 600 to 3840 × 2160, width 4 alignment, height 2 alignment
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 Channels	12
Video Encoding Capability	Sub-stream and main stream encoding; Sub-stream encoding contains: CIF(352 × 288)/FCIF(704 × 576), Main stream encoding contains: 720p(1280 × 720)/XVGA(1280 × 960)/ UXGA(1600 × 1200)/1080p(1920 × 1080)/XGA(1024 × 768)/ WXGA(1360 × 768)/SXGA(1280 × 1024)/SXGA(1400 × 1050)/ WSXGA(1440 × 900)/WSXGA+(1680 × 1050)/1920 × 1200/3840 × 2160
<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 loading capacity: 2.6 MP, Width: 288 to 3840; Height: 288 to 2160;
<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 Type	HDMI embedded

Encoding and Decoding	
Audio Decoding Format	G711-A, G711-U, G722.1, G726-16/U/A, MPG, AAC-LC
Encoding and Decoding	
Video Encoding Format	H.265(default) , H.264
Control Interface	
Serial Interface	1 × Console port (RJ-45) + 1 × reserved port for debugging + 2 × RS-485/RS-232 multiplex ports (RJ-45)

### ▪ Available Model

DS-B31-12H24H

▪ Dimension



Unit: mm [inch]

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