DHI-NVD0905DU-4I

Dahua 10CH UHD NETWORK VIDEO DECODER



Series Overview

The Network Video Decoder was specially engineered for video network surveillance systems. With a stylish design, powerful data processing capabilities, and stable network functions, it supports multiple existing encoding formats. It also offers easy scalability, maintenance, and integration with other platforms. Additionally, it can be easily installed and deployed, and supports unified control and management of the entire video network surveillance system. This comprehensive approach significantly reduces the overall system cost.

Functions

Seamless Compatibility with LED Screens

Supports ultra-wide and ultra-high resolutions, with a maximum resolution of 3840 × 3840 pixels across both the horizontal and vertical axes.

Strong Decoding Capability

Supports decoding videos with resolutions up to 7680 × 4320@60 fps from 32 MP cameras.

Effortless Integration with Security Platforms

Seamlessly integrates with Dahua's general and industry-specific platforms, creating a complete end-to-end solution for the security industry.

Ultra HD Acquisition

The device acquires ultra HD videos of 4K@60 fps, and supports video walls displaying images from the computer and video conferences.

- 9-ch HDMI signal output
- Up to 1920 × 1080@60 fps is supported to output standard resolutions through the output port.
- Supports ultra-wide and ultra-high resolutions. The maximum horizontal and vertical resolution is 3840 pixels.
- 4-ch HDMI signal input
- Up to 3840×2160@60 fps is supported to output standard resolutions through the input port.
- Includes two 3.5 mm audio intercom ports: One for input, and the other for output.
- The following decoding is supported by H.265: 3-ch 32MP@25 fps, 9-ch 12MP@25 fps, 14-ch 8MP@25 fps, 18-ch 6MP@25 fps, 24-ch 5MP@25 fps, 29-ch 4MP@25 fps, 37-ch 3MP@25 fps, 57-ch 1080p@25 fps, 192-ch D1@25 fps (H.264 supports a decoding capability of up to 47-ch of 1080p@25 fps)
- Supports MPEG2, MPEG4, H.264, H.265, SVAC and MJPEG video coding standards.
- Decodes video streams to multiple resolutions, including QCIF, CIF, 2CIF, HD1, D1, 960H, 720p, 1080p, 3 MP, 4MP, 5 MP, 6 MP, 8 MP, 12 MP and 32 MP.
- Supports PCM, G711 and AAC audio compression formats.
- Splits to 1, 4, 6, 8, 9, 16, 25 and 36 windows, and supports M × N custom split.
- Supports customized windowing and roaming. Windowing can be performed on up to 36 channels.
- Displays HD background images, and supports configuring the default background color for the video wall.
- Supports touring plans.
- Splits and synchronizes screens within milliseconds.
- Displays customized OSD text, such as the location and font size.
- ONVIF, RTSP, Hikvision and Dahua private protocols.

Scene

Widely used in monitoring centers, commercial displays, video conferences, and other scenes.

Technical Specification

System

Main Processor	High-performance embedded processor
Operating System	Embedded Linux

Function

Number of Video Output Channels	9-ch HDMI
Interoperability	ONVIF, RTSP, Hikvision Private, Dahua Private
Video Compression	H.265;H.264;MJPEG;MPEG4;SVAC;MPEG2
Audio Compression	PCM; G711; AAC
Decoding Capability	The following decoding is supported by H.265: 3-ch 32MP@25 fps, 9-ch 12MP@25 fps, 14-ch 8MP@25 fps, 18-ch 6MP@25 fps, 24-ch 5MP@25 fps, 29-ch 4MP@25 fps, 37-ch 3MP@25 fps, 57-ch 1080p@25 fps, 192-ch D1@25 fps (H.264 supports a decoding capability of up to 47-ch of 1080p@25 fps)
Decoding Pixel	QCIF; CIF; 2CIF; HD1; D1; 960H; 720p; 1080p; 3 MP; 4 MP; 5 MP; 6 MP; 8 MP; 12 MP; 32 MP
Output Resolution	Supports fixed output of the following resolutions: 1920 × 1080@60 Hz, 1600 × 1200@60 Hz, 1400 × 1050@60 Hz, 1600 × 900@60 Hz, 1366 × 768@60 Hz, 1280 × 1024@60 Hz, 1280 × 720@60 Hz, 1024 × 768@60 Hz Supports custom resolution output, with a maximum width and height of 3840 and a minimum width and height of 524.
Bit Rate Type	Composite stream; video stream
Video Input	4-ch HDMI Input port
Multi-screen Display	1/4/6/8/9/16/25/36 window splits. supports M × N custom split, M × N ≤ 36.
Screen Splicing	Up to 9 screens can be spliced together.
Window & Roam	Opens up to 36 windows, and supports roaming.
Scheme Tour	Supports configuring schemes, tour, scheduled schemes and setting the tour interval.
Fine Pixel Pitch LED	The video output resolution can be customized and fine pixel pitch LEDs can be accessed.
Background Image Color	Displays high-definition background images, and supports setting the default background color for the video wall.
Enable AI Function	Displays AI rules on a large screen.
Virtual LED	Displays customized OSD text, such as the location and font size.
Input Resolution	Decodes up to 1-ch 4K@60, 2-ch 4K@30 and 4-ch 1080p@60 simultaneous input. It also decodes to 4096 × 2160@60 Hz, 3840 × 2160@60 Hz, 3840 × 2160@30 Hz, 2560 × 1440@60 Hz, 1920 × 1080@60 Hz, 1600 × 900@60 Hz, 1366 × 768@60 Hz, 1024 × 768@60 Hz, 800 × 600@60 Hz
Local Decoding Latency	KVM IN 1080p@60 input, 1080p@60 output with a fusion screen latency of 150 ms.

Port

Video Output	9-ch HDMI
Audio Output	3.5 mm port
Alarm Input	1 channel
Alarm Output	1 channel
Network Port	1 × RJ-45 10/100/1,000 Mbps self-adaptive Ethernet port
RS-232	3 (1 × DB9, 2 × RJ-45)
USB	3 (2 × USB 3.0, 1 × USB 2.0)
RS-485	1

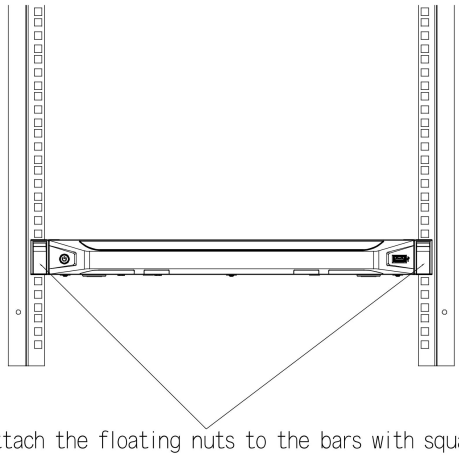
General

Power Supply	100–240 VAC, 50–60 Hz
Power Consumption	≤70 W
Operating Temperature	–10 °C to +55 °C (+14 °F to +131 °F)
Operating Humidity	10%–95% (RH), non-condensing
Product Dimensions	482.6 mm × 317.3 mm × 44.5 mm (19.00" × 12.49" × 1.75") (L × W × H)
Packaging Dimensions	536 mm × 402 mm × 140 mm (21.10" × 15.83" × 5.51") (L × W × H)
Gross Weight	5.3 kg–5.5 kg (11.68 lb–12.13 lb)
Net Weight	4.5 kg–4.8 kg (9.92 lb–10.58 lb)

Ordering Information

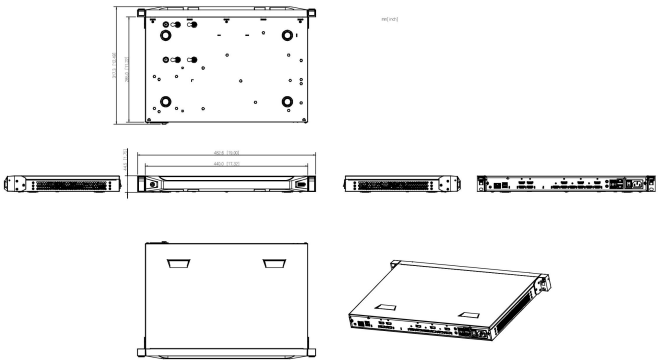
Type	Part Number	Description
NETWORK VIDEO DECODER	DHI-NVD0905DU-4I	Dahua 10CH UHD NETWORK VIDEO DECODER

Installation



Attach the floating nuts to the bars with square holes, and then fix the device to the bars with screws

Dimensions (mm[inch])

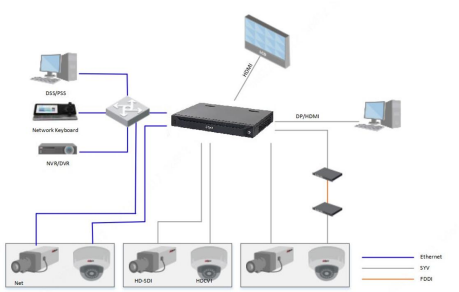


Panels



1	Ground
2	Network port (10/100/1000 Mbps Ethernet port)
3	USB 3.0 port
4	HDMI input port
5	HDMI output port
6	Audio out and audio in port
7	Alarm input, alarm output, standard RS–485 port
8	RS–232 port of screen control
9	Power button

Application



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