DHI-NVD1205DU-4I-8K

12CH UHD NETWORK VIDEO DECODER

- 12-channel HDMI video output.
- 8-channel HDMI audio output.
- Decodes videos to multiple video stream decoding standards, such as MPEG2, MPEG4, H.264, H.265, SVAC and MJPEG.
- Decodes video streams to multiple resolutions, including QCIF, CIF, 2CIF, HD1, D1, 720p, 1080p, 3 MP, 5 MP, 6 MP, 8 MP, 12 MP and 32 MP.
- Synchronously decodes to 3-channel 8K@60 fps, 27-channel 4K@30 fps, 108-channel 1080p@30 fps or 432-channel D1@30 fps videos.
- Splits to 1, 4, 6, 8, 9, 16, 25 and 36 windows, and supports M × N custom split.
- The following resolutions are supported through the HDMI output port: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 and 1024 × 768.
- Up to 3840 × 2160 is supported for the DP and HDMI input ports.

System Overview

Ultra HD Network Video Decoder is an outstanding decoder that has strong decoding capabilities and can manage a high number of concurrent channels. It works with low-latency cameras and performs low-latency decoding, meeting the needs of a variety of industries, such as the steel industry. The device acquires ultra HD videos of 4K@60 fps, and supports video walls displaying images from the computer and video conferences.

Functions

Strong Decoding Capability

Supports concurrent decoding of up to 3-channel 8K@60 fps or 108-channel 1080p@30 fps and has strong decoding capabilities and can manage a high number of concurrent channels.

Ultra-low Latency of Decoding

The device works with low-latency cameras and easily performs low-latency decoding at 60 to 80 ms, meeting the requirements of a variety of industries such as the steel 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.

Ultra HD Display

Displays Ultra HD videos of 8K@60 fps, producing smooth videos with clear, vivid colors.

Scene

It is ideal for commercial displays, and is widely used in monitoring centers and video conferences.

Technical Specification

System

Main Processor	High-performance embedded processor
Operating System	Embedded LINUX

Function

Number of Video Output Channels	12 × HDMI
Video Compression	SVAC; H.264; H.265; MJPEG; MPEG4; MPEG2
Audio Compression	PCM; G711; AAC
Decoding Capability	Performs H.264 and H.265 decoding (1080p@60 fps by default for output ports). Synchronously decodes to 3-channel 8K@60 fps, 27-channel 4K@30 fps, 108-channel 1080p@30 fps or 432-channel D1@30 fps videos.
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	1024 × 768@60 fps; 1280 × 720@60 fps; 1280 × 1024@60 fps; 1920 × 1080@60 fps; 1920 × 1200@60 fps; 2048 × 1152@60 fps; 3840 × 2160@30 fps; 3840 × 2160@60 fps
Bit Rate Type	Composite stream; video stream
Video Input	2 × DP; 2 × HDMI
Multi-screen Display	1/4/6/8/9/16/25/36 window splits per screen. Supports M × N custom split, M × N ≤ 36.
Screen Splicing	Splices together up to 12 screens.
Window & Roam	Opens up to 36 windows, and supports roaming.
Scheme Tour	Supports configuring schemes, tour, scheduled schemes and setting the tour interval.
Small-pitch LED	The video output resolution can be customized and small-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 people, their faces, motor and non-motor vehicles, crowd density and AI rules on a large screen.
Virtual LED	Supports OSD and configuring the position and font size of its content.
Input Resolution	800 × 600@60 fps; 1024 × 768@60 fps; 1152 × 864@60 fps; 1280 × 720@60 fps; 1280 × 800@60 fps; 1280 × 960@60 fps; 1280 × 1024@60 fps; 1366 × 768@60 fps; 1440 × 900@60 fps; 1680 × 1050@60 fps; 1920 × 1080@60 fps; 3840 × 2160@30 fps (supported only by HDMI2); 3840 × 2160@60 fps (supported only by DP2), 4096 × 2160@30 fps (supported only by DP2)

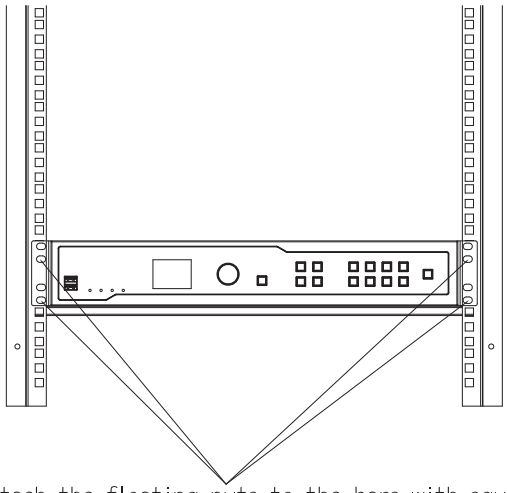
Port

Video Output	12 × HDMI
Audio Output	3.5 mm port, 8 × HDMI
Alarm Input	4 (5V TTL signal input)
Alarm Output	4 relay output (Linked output of 30 VDC 1A and 125 VAC 0.5A)
Network Port	2 × gigabit optical, 2 × gigabit electrical
RS-232	3 (1 × DB9, 2 × RJ-45)
USB	4 (2 × USB 3.0, 2 × USB 2.0)
RS-485	1

General

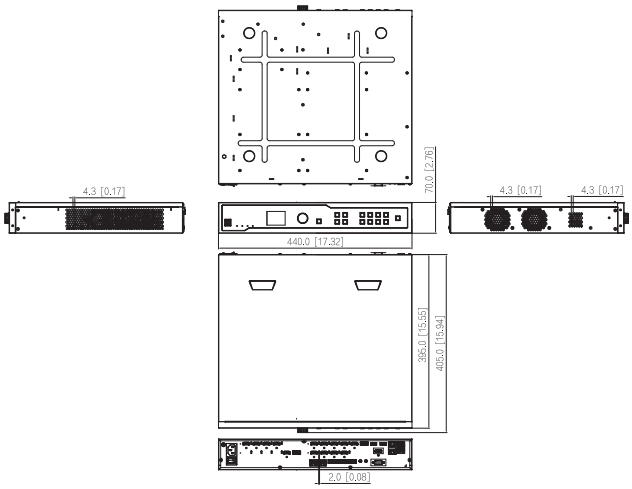
Power Supply	100–240 VAC, 50 Hz/60 Hz
Power Consumption	≤100 W
Operating Temperature	–10 °C to +55 °C (+14 °F to 131 °F)
Operating Humidity	10%–95% (86 kPa–106 kPa)
Product Dimensions	70 mm × 408 mm × 440 mm (2.76" × 16.06" × 17.32") (1.5 U) (H × W × D)
Packaging Dimensions	200 mm × 508 mm × 557 mm (7.87" × 20.00" × 21.93") (H × W × D)
Gross Weight	7.5 kg–7.8 kg (16.53 lb–17.20 lb)
Net Weight	5.5 kg–5.8 kg (12.13 lb–12.79 lb)

Installation

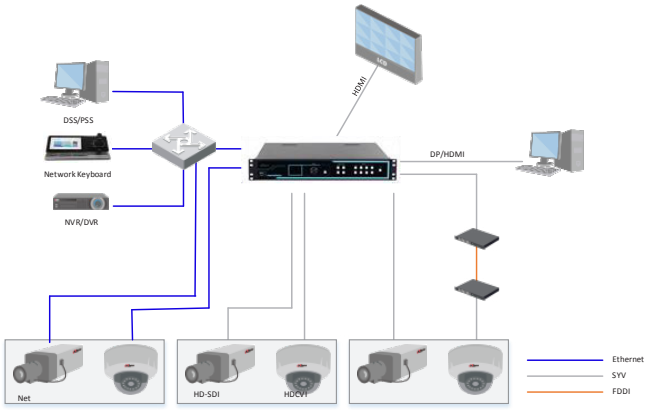


Attach the floating nuts to the bars with square holes, and then fix the device to the bars with screws

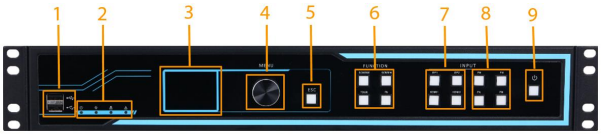
Dimensions (mm [inch])



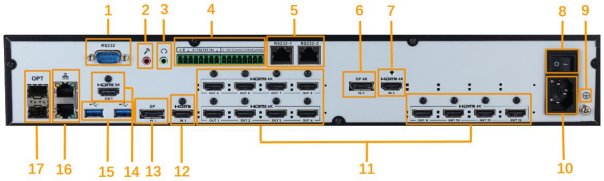
Application



Panels



1	USB2.0 port	2	Indicator light
3	Screen	4	Knob
5	Exit button	6	Function buttons
7	DP/HDMI information collection buttons	8	FN
9	Power button		



1	RS-232 port	2	Audio in
3	Audio out	4	Alarm in, alarm out, standard RS-485 port
5	RS-232 port for screen control	6	DP port (supports 4K acquisition)
7	HDMI port (supports 4K acquisition)	8	Power switch
9	Ground	10	Power header port
11	HDMI input	12	HDMI output
13	DP signal input	14	HDMI output (supports 8K output)
15	2 USB3.0 ports	16	2 network ports (10/100/1000 Mbps Ethernet port)
17	2 gigabit optical ports		