DHI-NVD2005DU-4I-8K-4H

Dahua 20CH UHD NETWORK VIDEO DECODER

Series 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 videos, 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.

- 20-ch HDMI signal output port..
- 12-ch 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, 960H, 720p, 1080p, 3 MP, 4MP, 5 MP, 6 MP, 8 MP, 12 MP and 32 MP.
- There are 4 ports in each group, and each group supports an equal portion of the device's decoding and video capabilities. It decodes to 10-ch 32MP@25 fps, (this is only supported by H.265), 35-ch 12MP@25 fps, 50-ch 8MP@25 fps, 70-ch 6MP@25 fps, 90-ch 5MP@25 fps, 90-ch 4MP@30 fps, 140-ch 3MP@25 fps,180-ch 1080p@30 fps, 500-ch D1@30 fps videos.
- Supports the following resolutions through the HDMI output port: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 and 1024 × 768.
- Up to 1920 × 1080 is supported for the DP and HDMI input ports.

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	20-ch HDMI
Interoperability	ONVIF; General; Dahua Private; Hikvision Private
Video Compression	H.265;H.264;MJPEG;MPEG4;SVAC;MPEG2
Audio Compression	PCM; G711; AAC
Decoding Capability	There are 4 ports in each group, and each group supports an equal portion of the device's decoding and video capabilities. It decodes to 10-ch 32MP@25 fps, (this is only supported by H.265), 35-ch 12MP@25 fps, 50-ch 8MP@25 fps, 70-ch 6MP@25 fps, 90-ch 5MP@25 fps, 90-ch 4MP@30 fps, 140-ch 3MP@25 fps,180-ch 1080p@30 fps, 500-ch 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-ch DP; 2-ch HDMI
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 20 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 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

Port

Video Output	20-ch HDMI
Audio Output	3.5 mm port, 12-ch HDMI
Alarm Input	4-ch
Alarm Output	4-ch
Network Port	2 × gigabit optical ports, 2 × gigabit electrical ports
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, 50–60 Hz
Power Consumption	≤160 W
Operating Temperature	−10 °C to +55 °C (14 °F to 131 °F)
Operating Humidity	10%–95% (RH), non-condensing
Product Dimensions	70 mm × 408 mm × 440 mm (2.76" × 16.06" × 17.32") (H × W × D)
Packaging Dimensions	220 mm × 508 mm × 557 mm (8.66" × 20.00" × 21.93") (H × W × D)
Gross Weight	8.7 kg–9.1 kg (19.18 lb–20.06 lb)
Net Weight	5.7 kg–6.0 kg (12.57 lb–13.23 lb)

Ordering Information

Type	Part Number	Description
NETWORK VIDEO DECODER	DHI-NVD2005DU-4I-8K-4H	Dahua 20CH UHD NETWORK VIDEO DECODER

Dimensions (mm[inch])