DS-6904UDI(C)
Ultra High Definition Decoder

DS-6900UDI Series decoders are developed on the basis of embedded hardware platform. DS-6904UDI is capable of outputting decoded video via HDMI 1.4, BNC (to DB15) interfaces, and also supports multiple video stream formats, like H.265, H.264, MJPEG, Smart264 and Smart265, which has good decoding performance. It supports H.265/H.264 decoding no more than 32 MP and 4K ultra-high-definition (UHD) video output, which is a new generation of decoder launched by our company for HD network cameras, which can be widely used in various video security system projects.

- Support computer, video conference terminals and other devices to serve as video input signal source.
- Support   HDMI 4K signal inputs.
- Support network camera, NVR, and other devices to serve as network signal source.
- Support embedded HDMI audio input; audio input supports 16 bit and 48K Hz, two audio channels and stereo sound.
- Support 2-ch 1080p@50/60 or 1-ch 4K@30 encoding via HDMI 1.4 input interface.
- Support 4K (3840 × 2160@30 Hz) UHD video output via HDMI 1.4 output interface.
- Support two audio output methods: embedded HDMI audio output and external audio output.
- Adopt frame synchronization technology to ensure complete synchronization of images from all output ports, complete pictures, smooth playback, and without lag, frame loss, tearing or splicing.
- Support H.264 and H.265 encoding of input boards, and sub-stream and mainstream encoding; the default encoding format is H.264.
- Support network cameras, NVR, and other network sources decoding of output boards, sub-stream and main stream decoding including H.264, H.265, Smart264, Smart265, MJPEG, HIK264 and main encapsulation formats such as PS, RTP, TS, ES.
- Support up to 64 video decoding channels and simultaneously decoding of 32-ch 2 MP or 64-ch 720p video decoding on the wall.
- Support decoding streams of multiple resolution no more than 32 MP.
- G.722, G.711A, G.726, G.711U, MPEG2-L2, AAC, MP3, PCM audio compression.
- Support rotate mode of front-end cameras decoding and up to 2560 × 1440 decoding output.
- Two decoding modes: active decoding and passive decoding.
- Support encryption stream, multi-channel stream, and smart stream decoding.
- Support stream editing and switching, and auto switching to the sub stream when the divided window quantity reaches the upper limit.
- Support remote video files decoding output.

- Support single video wall splicing, window opening, window roaming, scene switching, and windows switching.
- Support up to 3 1080p or 1.5 4K signal source windows per screen and each signal source window can be divided into 1, 2, 4, 6, 8, 9, 12, 16, and 25 windows.
- Support up to 64 scenes. You can customize the video wall layout and save it as a scene.
- Support 256 auto-switching plans. You can customize the camera, scenes, and time for each plan.
- You can double click the roaming window to zoom in and zoom out for one roaming window or divided roaming sub-window.
- Support displaying output channel number.
- Support operating network signal sources on video wall in eight directions, including auto-scanning, adjusting aperture, changing the focal length, focusing, and calling preset.
- Support starting/stopping the live view of the window, starting/stopping decoding, starting/stopping switching windows, turning on/off the sound, displaying the window on the top/bottom layer, and other operations.
- Support video recording playback. You can start or stop playback and select the video recording time.
- Support using smart wall clients to cast the screen on the wall.
- Support the live view of network signal sources over RTP/RTSP.
- Support docking with 32 MP PanoVu series cameras, fisheye cameras, and conventional front-end network cameras, DVR, NVR, and XVR.
- Support complete software development kit (SDK) for third-party developers.
- Support using the ONVIF and GB28181 protocol to access the decoder.
- Support LCD information interactive, including display information acquirement, image settings, series ports control, time synchronization, backlight parameters configuration and acquirement, output port auto-binding, error code reporting.
- Support using network keyboard or serial port keyboard to control the device, and support window switching, group operation and auto-switching, scene switching, PTZ control, and video wall playback via keyboard.
- Support the access and operation via PC client and Web client.
- Support Chrome 45+.
- Use the built-in gigabit switching network.
- Supports optoelectronic adaptation, link aggregation, and NAT.
- Support remote parameters configuration, getting system status and logs.
- Support daily maintenance such as remote restart, restore default settings and upgrading.
- Support auto fault detection and device exception alarm, including network disconnection, IP conflict, illegal access, temperature overshoot, fan status exception, decoding signal source exception and device exception.
- Support user permission management, allowing users with different permissions to use designated resources and operate designated video wall modules.
- Support visualization in operation and maintenance by displaying the network topology structure and keynote network status of main control units (MCU) and service boards.
- Support NTP time synchronization and manual time synchronization.

▪ Specification

Product Model	
Product Model	DS-6904UDI(C)
Interface	
Alarm In	8-ch alarm in
Alarm Out	8-ch alarm out
Serial Interface	RS-232 (RJ45) × 1, RS-485 × 1
USB Interface	USB 2.0 × 2
Network Interface	RJ45 × 1, 10 M/100 M/1000 Mbps self-adaptive Ethernet interface Optic Interface × 2 100 base-FX/1000 base-X Supports optoelectronic self-adaptation
Video Wall	
Video Walls	1
Video Wall Size	≤4
Layers Per Screen	1080p × 3 or 4K × 1.5
Split Window	yes
Layers	Layers Per Screen × Output Interface(s)
Scenes	64
Split Screen	1, 2, 4, 6, 8, 9, 12, 16, 25, 36
Scene Auto-Switch Delay	3 s
Background Images	Background color only
Delay of Displaying Local Signal Source on Video Wall	120 ms
Delay of Displaying Decoded Signal Source on Video Wall	120 ms
Auto-Switching Plans	Support 256 auto-switching plans
General	
Working Temperature	-10 °C to 55 °C (14 °F to 131 °F)
Working Humidity	10％ RH to 90％ RH
Net Weight	< 5.18 kg (11.42 lb)
Gross Weight	5.18 kg (11.42 lb)
Power Consumption	< 50 W
Packing List	Decoder × 1 DB15M to 4 × BNC (4-ch CVBS Video Patch Wire) × 1 DB15M to 4× BNC (8-ch Audio Patch Wire) × 1 Quick Start art Guide × 1 Regulatory Compliance and Safety Information × 1 Hanger × 1 Power Cord × 1 Mat × 4 Grounding Wire × 1
Dimensions (W × H × D)	440 mm × 320.8 mm × 44.5 mm (17.32'' × 12.63'' × 1.75'')
Power Supply	100 to 240 VAC
Audio Input	
Audio Input Interfaces	2

Audio Input Interface Type	embedded HDMI audio input
Video Input	
Video Input Resolution	3840 × 2160@30 Hz, 1920 × 1080@50 Hz, 1920 × 1080@60 Hz, 1280 × 720@50/60 Hz
Video Input Interface Type	2-ch: HDMI 1.4
Video Input Interfaces	2
Max. Video Input Resolution	4K
Video Encoding	
Video Encoding Format	H.265/H.264 Default H.264
Video Encoding Channel	2
Video Encoding Performance	1-ch: 4K 30 2-ch: 1080p 60
Audio Encoding	
Audio Encoding Format	G722.1, G711U, G711A, AAC-LC
Video Output	
Max. Video Output Resolution	4K
Video Output Interface Type	HDMI 1.4
Video Output Interfaces	4
Video Output Resolution	3840 × 2160@30 Hz, 2560 × 1440@30 Hz, 1920 × 1200@60 Hz, 1920 × 1080@60 Hz, 1920 × 1080@50 Hz, 1680 × 1050@60 Hz, 1600 × 1200@60 Hz, 1280 × 1024@60 Hz, 1280 × 720@60 Hz, 1280 × 720@50 Hz, 1024 × 768@60 Hz
Video Output Resolution (BNC)	PAL: 704 × 576@25 Hz, NTSC: 704 × 480@30 Hz
Video Output Interface (BNC)	1-ch: DB15 to BNC
Video Decoding	
Video Decoding Format	H.264, H.265, SmartH.264, SmartH.265, MJPEG
Video Decoding Resolution	Up to 32 MP
Video Decoding Channels	64
Video Decoding Capability	1) H.264/H.265 format: Support decoding 2-channel 32 MP/24 MP, 4-channel 12 MP, 8-channel 8 MP, 10-channel 6 MP, 16-channel 4 MP, 32-channel 1080p, 64-channel 720p and lower resolution in real time. Four output ports (HDMI output ports 1 to 4) form a group and the group share the decoding capabilities. The group supports up to 4-channel smart decoding or 4-channel encrypted stream decoding. The smart decoding allows the device to decode the smart alarm events from the network cameras. 2) MJPEG format: 4-channel of 1080p and lower resolution 3) HIK264 format: 2-channels of 720p and lower resolution
Audio Output	
Audio Output Interface Type	embedded HDMI audio output or DB15 to BNC independent audio output
Audio Output Interface(s)	4
Encoding and Decoding	
Audio Decoding Format	G711A, G711U, G722.1, G726-16/U/A, MPEG, AAC-LC, PCM

▪ Physical Interface

Front Panel	Description	Rear Panel	Description

CPU	System running status indicator, green for normal working status	AUDIO OUT	Audio Output Interface
PCIE	Internal communication status indicator, green for normal working status	VIDEO OUT	Video Output Interface
POWER	Power supply indicator, red for normal working status	HDMI OUT	HDMI Output Interface
HDMI IN1	HDMI Input Interface 1	RS-485	RS-485 Interface
HDMI IN2	HDMI Input Interface 2	ALARM IN	Alarm Input Interface
USB	USB 2.0 Interface	ALARM OUT	Alarm Output Interface
G1	1000 M Switching Network Interface 1		
OPT 1	1000 M Optical Interface 1		
RS-232	Device Debugging Serial Interface		
G2	1000 M Switching Network Interface 2		
OPT 12	1000 M Optical Interface 2		

▪ **Available Model**

DS-6904UDI(C)

See Far, Go Further

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