

## DS-6904UDI Ultra High Definition Decoder



DS-6900UDI Series decoders are developed on the basis of embedded hardware platform. DS-6904UDI supports HDMI 1.4, BNC (to DB15) output port decoding, and multiple video stream formats, like H.265, H.264, MJPEG, H.264+ and H.265+ with strong decoding performance. It supports H.265/H.264 decoding with resolution of no more than 3200 W and 4K ultra high definition outputs. It 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.

### Video Input

- Support computer, video conference terminals and so on video input signal source; support HDMI and HDMI 4K signal inputs.
- Support network camera, NVR, and other device types as network signal source inputs
- Support HDMI embedded audio input; audio input supports 16 bit and 48K Hz sampling, two-channel and stereo sound.
- Support 2-ch 1080@50/60 or 1-ch 4K@30 by HDMI 1.4 local directory input.

### Video Output

- Support HDMI 1.4 video signal output with 4K (3840 × 2160@30 Hz) ultra high definition output.
- Support two audio output methods: HDMI embedded audio and external audio output.
- Adopting frame synchronization technology to ensure complete synchronization of images from all output ports, complete graphics, smooth playback, no jamming or stuttering, no tearing or stitching.

### Video Encoding and Decoding

- Adopting H.264/H.265 encoding standard, the default is H.264, supporting sub-stream and main stream encoding.
- Support decoding of network sources such as IP cameras/NVR, decoding of sub-stream and main stream, and set automatic sub-stream extraction for segmented images.
- The device has 64 video decoding channels, supporting 32-ch 200 W or 64-ch 720p video decoding on the wall simultaneously.
- Support decoding streams of multiple resolution no more than 3200 W.
- H.264, H.265, H.264+, H.265+, MJPEG, HIK264 video compression decoding.
- PS, RTP, TS, ES encapsulation formats.
- G.722, G.711A, G.726, G.711U, MPEG2-L2, AAC, MP3, PCM audio compression decoding.
- Support front-end corridor mode decoding and up to 2560 × 1440 decoding output.
- Two decoding modes: active decoding and passive decoding.
- Support encryption stream, multi-track stream, and intelligent stream decoding; support stream modification and switching; support decoding exception prompt.

- Support remote video files decoding output.

#### Video Wall

- Support single sided video wall splicing, window opening, window cross screen roaming, scene rotation, and window rotation functions, with single screen support for three 1080p or 1.5 4K layers.
- Support 1/2/4/6/8/9/12/16/25 screen splitting.
- Support scenes configuration up to 64 scenes.
- Support 256 contingency plans rotation groups, each plan can be customized with setting points, scenes, and time.
- Support split screen sub-window double click to zoom in and zoom out.
- Support display output channel number.
- Support video wall interface to deal with network signal sources in eight directions, including automatic scanning, aperture, adjusting, focusing, and calling preset points.
- Support video wall window start/stop preview, start/stop decoding, start/stop polling, turn on/off sound, set top/bottom, and other operations.
- Support video playback function, and can start/stop playback and time selection for video recording.
- Support the use of smart wall clients to cast the desktop screen on the wall.
- Support RTP/RTSP protocol for network source preview.

#### Device Access

- Support docking with 3200 W eagle eye, fish eye, and conventional front-end network cameras, DVR, NVR, and XVR devices, compatible with mainstream third-party manufacturer security system devices.
- Support the platform to integrate the decoding devices by SDK.
- Support ONVIF and GB28181 protocol to access the decoder.
- Support LCD information interactive, including display information acquirement, image configuration, series ports control, time synchronization, backlight parameters configuration and acquirement, output port disconnected automatically, error code uploaded.

#### Maintenance

- Support network keyboard/serial port keyboard access for device control, and perform video screen switching, group operation and rotation, field switching, PTZ control, video wall playback, etc. through keyboard operation.
- Support PC client, login and operation through web browser.
- Chrome 45+ support.
- Built-in gigabit switching network that supports optoelectronic adaptation, link aggregation, and NAT function.
- Support remote acquisition, and configuration of parameters, as well as remote export and import of parameters.
- Support remote system working status and system logs acquirement.
- Support daily maintenance such as remote reboot, restore default setting and upgrading.
- Support auto-check and alarm, including network disconnect, IP conflict, illegal access, temperature exceeding limits, abnormal fan status, abnormal decoding signal source and device.
- Support user permission management, allowing users with different permissions to use designated resources and operate designated video wall modules.
- Support visual maintenance, display the main control and subsystem network topology structure and keynote network status on the maintenance interface.
- Support NTP time synchronization and manual time synchronization.

## ▪ Specification

| Model                 |                                    | DS-6904UDI                                                                                                                                                                                                 |
|-----------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interface             | Network Interface                  | RJ45 × 1, 10 M/100 M/1000 Mbps self-adaptive Ethernet interface<br>Optic Interface × 1, 100 base-FX/1000 base-X<br>Supports optoelectronic adaptation                                                      |
|                       | 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                                                                                                                                                                                                |
| Video Wall Parameters | Video Wall No.                     | 1                                                                                                                                                                                                          |
|                       | Video Wall Size                    | ≤ 4                                                                                                                                                                                                        |
|                       | Split Window                       | Yes                                                                                                                                                                                                        |
|                       | Split Screen                       | 1, 2, 4, 6, 8, 9, 12, 16, 25                                                                                                                                                                               |
|                       | Screen Layer                       | 1080p × 3 or 4K × 1.5                                                                                                                                                                                      |
|                       | Window Layer                       | Screen Layer NO. × Interface No.                                                                                                                                                                           |
|                       | Scene No.                          | 64                                                                                                                                                                                                         |
|                       | Scene Auto-Switch Delay            | 3 s                                                                                                                                                                                                        |
|                       | Contingency Plans NO.              | Support 256 platform contingency plans                                                                                                                                                                     |
|                       | Base Image No.                     | Background color only                                                                                                                                                                                      |
|                       | Subtitle No.                       | N/A (optional to support)                                                                                                                                                                                  |
|                       | Local Signal Source Decoding Delay | 120 ms                                                                                                                                                                                                     |
|                       | Decoding Signal Source Delay       | 120 ms                                                                                                                                                                                                     |
|                       | General                            | Working Temperature                                                                                                                                                                                        |
| Working Humidity      |                                    | 10% to 90%                                                                                                                                                                                                 |
| Net Weight            |                                    | ≤ 5.20 Kg (11.46 lb)                                                                                                                                                                                       |
| Gross Weight          |                                    | ≤ 6.28 Kg (13.85 lb)                                                                                                                                                                                       |
| Dimensions(W × D × H) |                                    | 440 mm × 320.8 mm × 44.5 mm (17.32 inch × 12.63 inch × 1.75 inch)                                                                                                                                          |
| Power Supply          |                                    | Build-in 220 VAC                                                                                                                                                                                           |
| Power Consumption     |                                    | < 50 W                                                                                                                                                                                                     |
| Packing List          |                                    | Decoder × 1<br>DB15M to 4 × BNC (4-ch CVBS Video Patch Wire) × 1<br>DB15M to 4 × BNC (4-ch Audio Patch Wire) × 1<br>User Guide × 1<br>Ear Bag × 10<br>Power Cord × 1<br>Foot Pad × 4<br>Grounding Wire × 1 |
| 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                                                                                                                                                                                             |
|                       | Max. Input Resolution              | 4K (optional to support)                                                                                                                                                                                   |
| Video Encoding        | Video Encoding Format              | H. 265/H.264<br>Default H.264                                                                                                                                                                              |
|                       | Video Encoding Channel             | 2                                                                                                                                                                                                          |
|                       | Video Encoding Performance         | 1-ch: 4K 30<br>2-ch: 1080p 60                                                                                                                                                                              |
| Audio Input           | Audio Input Interface No.          | 2                                                                                                                                                                                                          |
|                       | Audio Input Interface Type         | HDMI embedded                                                                                                                                                                                              |

|                       |                               |                                                                                                                                                                                                              |
|-----------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Audio Encoding</b> | Audio Encoding Format         | G722.1, G711U, G711A, AAC                                                                                                                                                                                    |
| <b>Video Output</b>   | Output Interface Type         | HDMI 1.4                                                                                                                                                                                                     |
|                       | Output Interface NO.          | 4                                                                                                                                                                                                            |
|                       | Max. Output Resolution        | 4K                                                                                                                                                                                                           |
|                       | 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 |
|                       | Output Interface(DB15 to BNC) | 1-ch: DB15 to BNC                                                                                                                                                                                            |
|                       | Output Resolution(BNC )       | PAL: 704 × 576, NTSC: 704 × 480                                                                                                                                                                              |
| <b>Video Decoding</b> | Video Decoding Format         | H.264, H.265, H.264+, H.265+, MJPEG                                                                                                                                                                          |
|                       | Decoding Resolution           | Up to 3200 W                                                                                                                                                                                                 |
|                       | Video Decoding Channel        | 64                                                                                                                                                                                                           |
|                       | Video Decoding Performance    | Support 2-ch 3200 W/2400 W/4-ch 1200 W/8-ch 800 W/10-ch 600 W/16-ch 400 W/32-ch 1080p and below real-time decoding(4 outputs in a group, sharing decoding capabilities)                                      |
| <b>Audio Output</b>   | Audio Output Interface No.    | 4                                                                                                                                                                                                            |
|                       | Audio Output Interface Type   | HDMI embedded or DB15 to BNC independent audio output                                                                                                                                                        |
| <b>Audio Decoding</b> | Audio Decoding Format         | G711A, G711U, G722.1, G726-16/U/A, MPEG, AAC-LC                                                                                                                                                              |

## Physical Interface

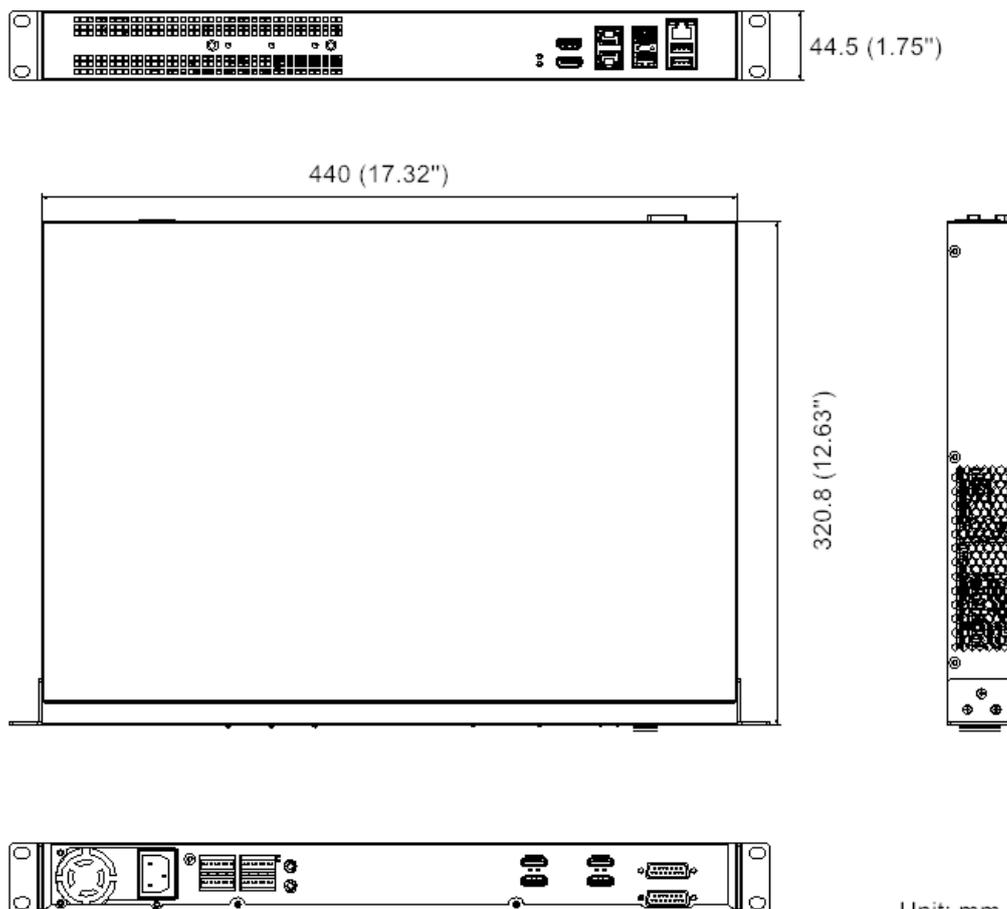
| Front Panel | Description                                                              | Rear Panel | Description            |
|-------------|--------------------------------------------------------------------------|------------|------------------------|
| CPU         | System running status indicator, 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 |
| G           | 1000 M Switching Network Interface                                       |            |                        |
| OPT 1       | 1000 M Optical Interface 1                                               |            |                        |
| RS-232      | Device Debugging Serial Port                                             |            |                        |



## Available Model

DS-6904UDI(C)

▪ Dimension



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