

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 Optic Interface × 1, 100 base-FX/1000 base-X 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 DB15M to 4 × BNC (4-ch CVBS Video Patch Wire) × 1 DB15M to 4 × BNC (4-ch Audio Patch Wire) × 1 User Guide × 1 Ear Bag × 10 Power Cord × 1 Foot Pad × 4 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 Default H.264 |
| | Video Encoding Channel | 2 |
| | Video Encoding Performance | 1-ch: 4K 30 2-ch: 1080p 60 |
| Audio Input | Audio Input Interface No. | 2 |
| | Audio Input Interface Type | HDMI embedded |

| | | |
|-----------------------|-------------------------------|--|
| Audio Encoding | Audio Encoding Format | G722.1, G711U, G711A, AAC |
| Video Output | 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 |
| Video Decoding | 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) |
| Audio Output | Audio Output Interface No. | 4 |
| | Audio Output Interface Type | HDMI embedded or DB15 to BNC independent audio output |
| Audio Decoding | Audio Decoding Format | G711A, G711U, G722.1, G726-16/U/A, MPEG, AAC-LC |

Physical Interface

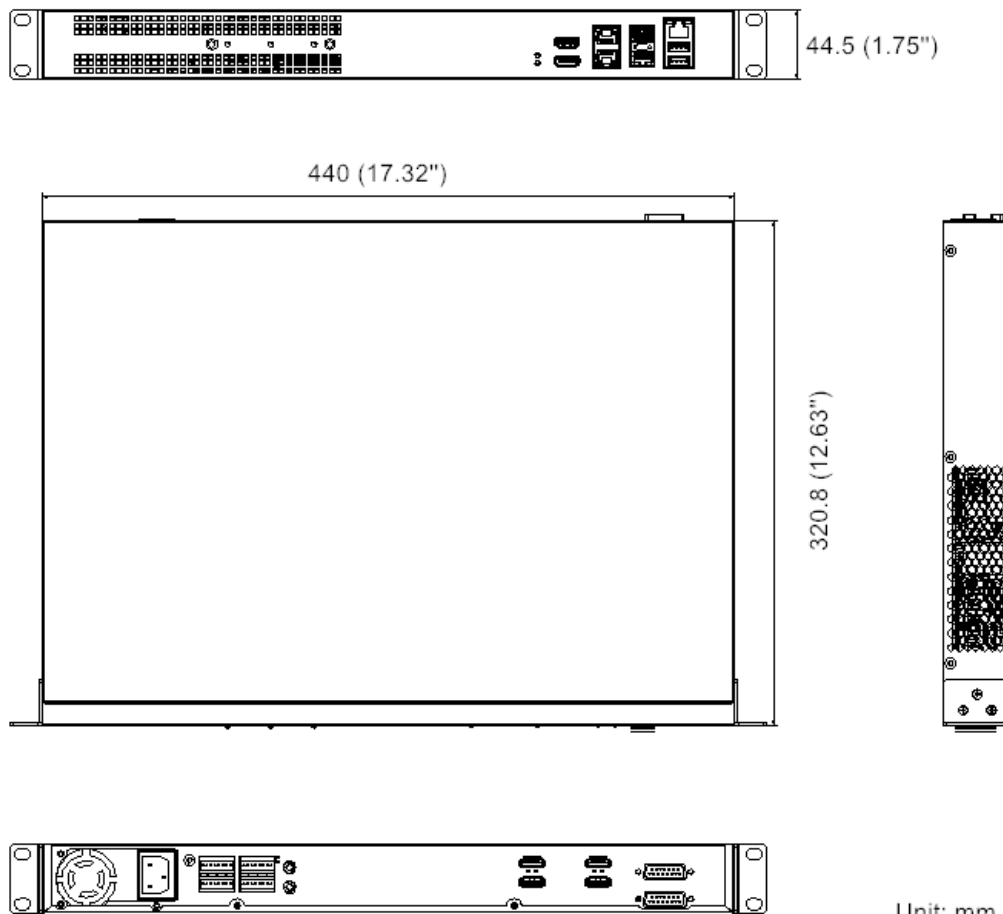
| Front Panel | Description | Rear Panel | Description |
|-------------|--|------------|------------------------|
| CPU | System running status indicator, green for normal working status | AUDIO OUT | Audio Output Interface |
| PCIE | Internal communication status indicator, green for normal working 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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