



**DS-7100HWI/HVI-SL Series DVR**  
**Technical Specification**

## **Main Features**

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- **Main stream supports encoding at up to WD1 resolution in real time and sub stream at CIF/QCIF resolution.**
- **Simultaneous VGA and CVBS outputs.**
- **VGA output at up to 1920×1080P resolution.**
- **Channel-zero encoding.**
- **Support dual stream.**
- **HDD quota management; different capacity can be assigned to different channels.**
- **Holiday recording schedule configuration.**
- **Smart searching for the event triggered record files.**
- **Digital zoom of video in live view or playback mode.**
- **Up to 4/8/16-ch synchronous playback.**
- **1 self-adaptive 10M/100Mbps network interface.**
- **IPv6 is supported.**
- **Network detection function.**
- **NTP, SMTP, UPnP™, RTSP protocols supported.**

## Functions & Performances

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### General

- PAL/NTSC adaptive video inputs.
- H.264 video compression with high reliability and superior definition.
- Each channel supports dual-stream.
- Main stream supports encoding at up to WD1 resolution in real time and sub stream at CIF/QCIF resolution.
- Independent configuration for each channel, including resolution, frame rate, bit rate, image quality, etc.
- The quality of the input and output video is configurable.
- Normal and event recording parameters configurable for per individual camera.
- Encoding for both audio/video composite stream and video stream; audio and video synchronization during composite stream encoding.
- Watermark technology.

### Local Monitoring

- VGA output at up to 1920×1080P resolution.
- 1/4/6/8/9/16-division live view is supported, and the display sequence of screens is adjustable.
- Live view screen can be switched in group, and manual switch and automatic cycle view is also provided, the interval of automatic cycle can be adjusted.
- Quick setting menu is provided for live view.
- The selected live view channel can be shielded.
- Motion detection, tamper-proof and video loss alarm functions.
- Privacy mask.

### HDD Management

- 1 SATA hard disk can be connected, with a maximum of 4TB storage capacity.
- HDD quota management; different capacity can be assigned to different channels.

### Recording and Playback

- Holiday recording schedule configuration.
- Normal and event video encoding parameters.
- Multiple recording types: manual, normal and motion.
- 8 recording time periods with separated recording types.
- Pre-record and post-record for motion detection for recording, and pre-record time for schedule and manual recording.
- Searching record files by event.
- Customization of tags, searching and playing back by tags.
- Locking and unlocking record files.
- Searching and playing back record files by channel number, recording type, start time, end time, etc.
- Smart search for the selected area in the video.
- Zooming in when playback.
- Playing reversely.
- Supports pause, slow forward, fast forward, skip forward, and skip backward when playback, locating by dragging the mouse.

- Up to 4/8/16-ch synchronous playback.

## **Backup**

- Export video data by USB storage device.
- Export video clips when playback.
- Management and maintenance of backup devices.

## **Alarm and Exception**

- Alarm for video loss, motion detection, tampering, video input/output standard mismatch, illegal login, network disconnected, IP confliction, HDD error, and HDD full, etc.
- Alarm event triggers full screen monitoring, audio alarm, notifying surveillance center and sending email.
- Automatic restore when system is abnormal.

## **Other Local Functions**

- Operable by mouse.
- Three-level user management; admin user is allowed to create many operating accounts and define their operating permission, which includes the limit to access any channel.
- Operation, exceptions and log recording and searching.
- Import and export of device configuration information.

## **Network Functions**

- 1 self-adaptive 10M/100Mbps network interface.
- IPv6 is supported.
- TCP/IP protocol, PPPoE, DHCP, DNS, DDNS, NTP, SADP, SMTP, UPnP™, RTSP are supported.
- TCP, UDP and RTP for unicast.
- Remote search, playback, download, locking and unlocking the record files, and downloading files broken transfer resume.
- Remote parameters setup; remote import/export of device parameters.
- Remote viewing of the device status, system logs and alarm status.
- Remote locking and unlocking of control panel and mouse.
- Remote HDD formatting and program upgrading.
- Remote system restart.
- Alarm event and exception information can be sent to the remote host.
- Remotely start/stop recording.
- Upgrade by remote FTP server.
- Two-way audio and voice broadcasting.
- Embedded WEB server.

## **Development Scalability**

- SDK for Windows and Linux system.
- Source code of application software for demo.
- Development support and training for application system.

## Panels & Interfaces

### Rear Panel

#### DS-7108HWI-SL:



**Note:** The DS-7104HWI-SL provides 4 video input interfaces and the DS-7116HWI/HVI-SL provides 16 video input interfaces on the rear panel.

- ① VIDEO IN
- ② VIDEO OUT
- ③ VGA Interface
- ④ AUDIO IN, RCA Connector
- ⑤ AUDIO OUT, RCA Connector
- ⑥ LAN Network Interface
- ⑦ USB Interface
- ⑧ GND
- ⑨ 12 VDC

## Specifications

Model		DS-7104HWI-SL	DS-7108HWI-SL	DS-7116HWI-SL
Video/ Audio input	Video compression	H.264		
	Video input	4-ch	8-ch	16-ch
	Video input interface	BNC (1.0 Vp-p, 75 Ω), PAL/NTSC self-adaptive		
	Audio compression	G.711u		
	Audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ)		
	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1 kΩ) (using Audio In)		
Video/Au dio output	VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz		
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480		
	Encoding resolution	WD1 / 4CIF / 2CIF / CIF / QCIF		
	Frame rate	25 fps (P) / 30 fps (N)		
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)		
	Audio output	1-ch, RCA (Linear, 600 Ω)		
	Audio bit rate	64 Kbps		
	Dual-stream	Support; Sub-stream: CIF / QCIF @ 25 fps (P) / 30 fps (N))		
	Stream type	Video, Video & Audio		
	Synchronous playback	4-ch	8-ch	16-ch
Hard disk	SATA	1 SATA interface		
	Capacity	Up to 4TB capacity		
External interface	Network interface	1, RJ45 10M / 100M Ethernet interface		
	USB interface	2 × USB 2.0		
General	Power supply	12 VDC		
	Consumption (without HDD or DVD-R/W)	≤ 5W	≤ 7W	≤ 9W
	Working temperature	-10°C ~ +55°C		
	Working humidity	10% ~ 90%		
	Chassis	1U chassis		
	Dimensions (W × D × H)	200 × 200 × 45 mm		285 × 210 × 45 mm
	Weight (without HDD or DVD-R/W)	≤ 0.8 kg	≤ 1 kg	≤ 1.5 kg

<b>Model</b>		<b>DS-7116HVI-SL</b>
<b>Video/Audio input</b>	Video compression	H.264
	Video input	16-ch
	Video input interface	BNC (1.0 Vp-p, 75 $\Omega$ ), PAL /NTSC self-adaptive
	Audio compression	G.711u
	Audio input	1-ch, RCA (2.0 Vp-p, 1 k $\Omega$ )
	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1 k $\Omega$ ) (using Audio In)
<b>Video/Audio output</b>	VGA output	1-ch, resolution: 1080P: 1920×1080/60Hz, SXGA: 1280×1024/60Hz, 720P: 1280×720/60Hz, XGA: 1024×768/60Hz
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 $\Omega$ ), resolution: PAL: 704 × 576, NTSC: 704 × 480
	Encoding resolution	WD1 / 4CIF / 2CIF / CIF / QCIF
	Frame rate	WD1: 8fps; 4CIF/2CIF: 10fps; CIF / QCIF: 25 fps (P) / 30 fps (N)
	Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 3072 Kbps)
	Audio output	1-ch, RCA (Linear, 600 $\Omega$ )
	Audio bit rate	64 Kbps
	Dual-stream	Support; Sub-stream: CIF / QCIF @ 25 fps (P) / 30 fps (N))
	Stream type	Video, Video & Audio
	Synchronous playback	16-ch
<b>Hard disk</b>	SATA	1 SATA interface
	Capacity	Up to 4TB capacity
<b>External interface</b>	Network interface	1, RJ45 10M / 100M Ethernet interface
	USB interface	2 × USB 2.0
<b>General</b>	Power supply	100~240VAC, 5A, 50~60Hz
	Consumption (without HDD or DVD-R/W)	≤ 9W
	Working temperature	-10°C ~ +55°C
	Working humidity	10% ~ 90%
	Chassis	1U chassis
	Dimensions (W × D × H)	285 × 210 × 45 mm
	Weight (without HDD or DVD-R/W)	≤ 1.5 kg