



**DS-7204HFI-SH Series DVR**  
**Technical Specification**

## Notices

---

The information in this documentation is subject to change without notice and does not represent any commitment on behalf of HIKVISION. HIKVISION disclaims any liability whatsoever for incorrect data that may appear in this documentation. The product(s) described in this documentation are furnished subject to a license and may only be used in accordance with the terms and conditions of such license.

Copyright © 2006-2012 by HIKVISION. All rights reserved.

**This documentation is issued in strict confidence and is to be used only for the purposes for which it is supplied.** It may not be reproduced in whole or in part, in any form, or by any means or be used for any other purpose without prior written consent of HIKVISION and then only on the condition that this notice is included in any such reproduction. No information as to the contents or subject matter of this documentation, or any part thereof, or arising directly or indirectly therefrom, shall be given orally or in writing or shall be communicated in any manner whatsoever to any third party being an individual, firm, or company or any employee thereof without the prior written consent of HIKVISION. Use of this product is subject to acceptance of the HIKVISION agreement required to use this product. HIKVISION reserves the right to make changes to its products as circumstances may warrant, without notice.

**This documentation is provided “as-is,” without warranty of any kind.**

Please send any comments regarding the documentation to:

[overseasbusiness@hikvision.com](mailto:overseasbusiness@hikvision.com)

Find out more about HIKVISION at [www.hikvision.com](http://www.hikvision.com)

## Main Features

---

- **Recording at 4CIF resolution real time.**
- **Simultaneous HDMI, VGA and CVBS outputs.**
- **HDMI output and VGA output at up to 1920×1080P resolution.**
- **Channel-zero encoding.**
- **Support dual stream.**
- **HDD quota management; different capacity can be assigned to different channel.**
- **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-ch synchronous playback.**
- **1 self-adaptive 10M/100M network interface.**
- **IPv6 is supported.**
- **Network detection function.**
- **NTP, SMTP, NFS, UPnP™ and iSCSI protocols supported.**

---

## Functions & Performances

---

### Compression

- PAL/NTSC adaptive video inputs.
- H.264 video compression with high reliability and superior definition.
- Each channel supports dual-stream.
- Recording at 4CIF resolution in real time.
- 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

- Simultaneous HDMI, VGA and CVBS outputs.
- HDMI/VGA output at up to 1920×1080P resolution.
- 1/4-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 review 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, video exception and video loss alarm functions.
- Privacy mask.
- Several PTZ protocols supported; PTZ preset, patrol and pattern.
- Zooming in by clicking the mouse and PTZ tracing by dragging mouse.

### HDD Management

- 1 SATA hard disk, with a maximum of 4TB storage capacity.
- 8 network disks (8 NAS disks, or 7 NAS disks+1 IP SAN disk) can be connected.
- HDD group management.
- Support HDD standby function.
- HDD property: redundancy, read-only, read/write (R/W).
- HDD quota management; different capacity can be assigned to different channel.

### Recording, Capture 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.
- Local redundant recording.
- 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, speed up, speed down, skip forward, and skip backward when playback, locating by dragging the mouse.
- Up to 4-ch synchronous playback at 4CIF resolution.

## Backup

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

## Alarm and Exception

- Alarm for video loss, motion detection, tampering, abnormal signal, video input/output standard mismatch, illegal login, network disconnected, IP confliction, abnormal record, 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, or IR remote control.
- 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/100M network interface.
- IPv6 is supported.
- TCP/IP protocol, PPPoE, DHCP, DNS, DDNS, NTP, SADP, SMTP, SNMP, UPnP™, NFS, and iSCSI 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.
- RS-485 transparent channel transmission.
- Alarm event and exception information can be sent to the remote host.
- Remotely start/stop recording.
- Upgrade by remote FTP server.
- Remote PTZ control.
- 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

---

### Front Panel

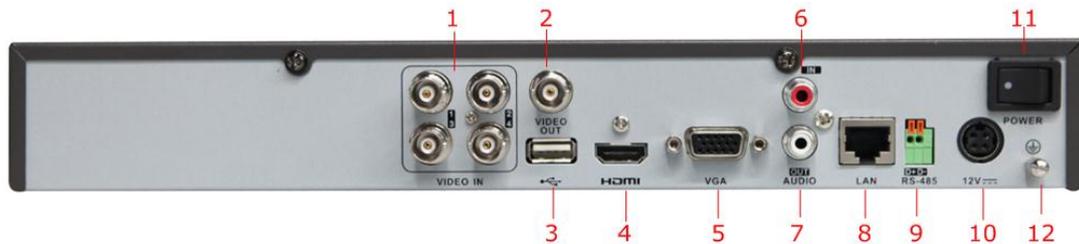
**DS-7204HFI-SH:**



- ① POWER Indicator
- ② STATUS Indicator
- ③ Tx/Rx Indicator
- ④ USB Interface
- ⑤ IR Receiver

## Rear Panel

### DS-7204HFI-SH:



- ① VIDEO IN
- ② VIDEO OUT
- ③ USB Interface
- ④ HDMI Interface
- ⑤ VGA Interface
- ⑥ AUDIO IN, RCA Connector
- ⑦ AUDIO OUT, RCA Connector
- ⑧ LAN Network Interface
- ⑨ RS-485 Serial Interface
- ⑩ 12VDC Power Input
- ⑪ Power Switch
- ⑫ GND

## Specifications

Model	DS-7204HFI-SH	
Video/Audio input	Video compression	H.264
	Video input	4-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 the audio input)
Video/Audio output	HDMI/VGA output	1-ch, resolution: 1920 × 1080P / 60 Hz ,1600 × 1200 / 60 Hz,1280 × 1024 / 60 Hz, 1280 × 720 / 60 Hz, 1024 × 768 / 60 Hz
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480
	Video loop out (optional)	4-ch, BNC (1.0 Vp-p, 75 Ω)
	Encoding resolution	4CIF / 2CIF / CIF / QCIF
	Frame rate	25 fps (P) / 30 fps (N)
	Video bit rate	32 Kbps ~ 2048 Kbps, or user defined (Max. 3072 Kbps)
	Audio output	1-ch, RCA (Linear, 1 kΩ)
	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
Hard disk	SATA	1 SATA interface
	Capacity	Up to 4TB capacity
External interface	Network interface	1, RJ45 10M / 100M Ethernet interface
	Serial interface	1 RS-485 interface, half-duplex

	<b>USB interface</b>	2, USB2.0
<b>General</b>	<b>Power supply</b>	12 VDC
	<b>Consumption (without hard disk or DVD-R/W)</b>	≤ 10 W
	<b>Working temperature</b>	-10 °C ~+55 °C
	<b>Working humidity</b>	10% ~ 90%
	<b>Chassis</b>	Standalone 1U chassis
	<b>Dimensions (W × D × H)</b>	315 × 230 × 45 mm
	<b>Weight</b>	≤ 2 kg (without hard disk or DVD-R/W)