



**DS-7204HI-S Series Net DVR**  
**Technical Manual**

## Notices

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## 1. Overview

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DS-7204HI-S series network digital video recorder is a digital surveillance product applies an embedded MCU and Linux OS, along with the most advanced technology in the information industry, such as video and audio encoding/decoding, hard disk recording and TCP/IP. The firmware is burned into the flash, making the product more stable and reliable.

DS-7204HI-S series devices combine the advantages of both a digital video recorder (DVR) and a digital video server (DVS). It can be used as a standalone video surveillance product, as well as to build up a powerful surveillance network. DS-7204HI-S Net DVR can be widely used in the verticals of banking, telecommunications, transportation sectors, and manufacturing.



**DS-7204HI-S/Hi-VS Front Panel**



**DS-7204HI-S Rear Panel**



**DS-7204HI-VS Rear Panel**

## 2. Model Description

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**DS-7204HI-S:** 4-ch video input and 1-ch audio input. No VGA output. SATA HDD supported. 1-ch composited video output and 1-ch spot video output.

**DS-7204HI-VS:** 4-ch video input and 1-ch audio input. One VGA output. SATA HDD supported. 1-ch composited video output and 1-ch spot video output.

**Note: The default DVRs are without HDD.**

## **3. Features**

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### **3.1 Compression**

- H.264 video compression in real-time (PAL: 25FPS, NTSC: 30FPS). Each channel is independent.
- One channel audio input and output. Each channel is independent with OggVorbis compression at a bit rate of 16Kbps.
- Multi-area motion detection.
- On-screen display (OSD) and changeable OSD & Logo position.
- Supports both constant bit rate and variable bit rate.
- Supports dual-stream, and the sub stream can support CIF/QCIF resolution.
- 2 stream types, including video & audio and video only. Either composited stream or video-only stream can be selected.

### **3.2 Local Functions**

#### **3.2.1 Recording**

- Supports SATA HDD which can support up to 2000GB memory.
- HDD S.M.A.R.T. technology
- Supports FAT32 file system
- Multiple record types, including manual recording, all time, motion detection, alarm, motion & alarm, motion or alarm, command.
- Cycle and none cycle recording mode.
- Backup recorded files and clips with USB flash disk or USB hard disk.

#### **3.2.2 Preview & Playback**

- Supports one composited video output and one spot video output
- DS-7204HI-VS can support one VGA output.
- Sensitive area masking.
- View tampering alert.
- Supports video signal loss alert.
- Supports play forward, backward, pause, frame-by-frame, etc.
- User-defined preview layout.
- Supports one playback channel.
- Playback by files or by time.
- Display local recording status.

**3.2.3 PTZ**

- Several PTZ protocols supported
- Preset, sequence and cruise

**3.2.4 Alarms**

- Exception alarm, motion detection alarm, external alarm, etc.

**3.3 Network**

- Supports TCP, UTP, Multicast, DHCP, etc
- PPPoE for ADSL dialup.
- Remote parameters setup
- Remote download and playback the recorded files in DVR.
- Remote upgrade the DVR firmware
- Network PTZ control
- IE to preview and configure DVR.
- View and search log through client software

**3.4 Others**

- Supports network voice talk.
- IR remote control
- Multi-level user management.
- Automatically recovery from abnormal conditions.
- Network SDK and client demo source code available

## 4. Specifications

Item \ Model	DS-7204HI-S	DS-7204HI-VS
Video compression	H.264	
Preview resolution	PAL: 352×288 ; NTSC: 352×240	
Playback resolution	QCIF/CIF	
Video input	4	
Video input interface	BNC (Electrical Level: 1.0Vp-p, resistance: 75Ω)	
Composite video output	1 channel, BNC (Electrical Level: 1.0Vp-p, resistance: 75Ω)	
Spot video Output	1 channel, BNC (Electrical Level: 1.0Vp-p, resistance: 75Ω)	
Frame rate	PAL:1/16 to 25FPS, NTSC: 1/16 to 30FPS	
Audio compression	OggVorbis	
Audio compression rate	16Kbps	
Audio input	1	
Audio input interface	RCA (Electrical Level: 2.0Vp-p, Resistance: 1KΩ)	
Audio output	1 channel, RCA (Linear Electrical Level, Resistance: 600Ω)	
Stream type	Video/Video&Audio	
Bit rate	32Kbps to 2Mbps, self-defined	
HDD interface	1 SATA interface can support 1 SATA HDD up to2000GB in total	
Communication interface	1 RJ45 10M/100M self-adaptive Ethernet Interface 1 RS-485 interface	
USB interface	1 USB interface, USB2.0	
VGA interface	Unavailable	1 VGA interface can support resolution: 800×600/60Hz, 1024×768/60Hz, 1280 ×1024/60Hz
External alarm in	4	
Relay output	1	
Voice talk	1 channel, RCA (Electrical Level: 2.0Vp-p, Resistance: 1KΩ)	
Dual stream	Available	
Power supply	12VDC	



Power consumption	≤10W (without HDD)
Operating temperature	-10°C to +55°C
Relative humidity	10% to 90%
Size	315×230×45 mm
Weight	< 8Kg (without HDD)

PAL: 176×144(QCIF), 352×288(CIF), 704×288(2CIF), 528×384(DCIF), 704×576(4CIF);  
NTSC: 176×120(QCIF), 352×240(CIF), 704×240(2CIF), 528×320(DCIF), 704×480(4CIF).