HD-TVI DVR: Hikvision iDS-7204HUHI-M1/S(C) (4-ch, 5 MP, 12 fps, H.265, 4 x AcuSense, HDMI, VGA)

Code: M75534



Front view



Back view



The accessories included

The Hikvision iDS-7204HUHI-M1/S(C) is a 4-channel, multi-system DVR capable of recording video from cameras: HD-TVI, AHD, CVBS and IP.

The DVR for an analog system can record images with the following resolution and frame rate:

- 8 MP at 8 fps (only for 1 channel and HD-TVI system),
- . 5 MP at 12 fps,
- 4 MP at 15 fps,
- 3 MP at 18 fps,
- 2 MP (1080p) and below 25 fps.

In the standard mode, 4 analog cameras can be connected to BNC inputs and 1 IP camera (up to 8 MP). If an analog channel is unused, disabling it in the menu adds support for a new IP camera. When all analog channels are disabled, 5 IP cameras can be connected.

Enhanced IP mode

By activating the Enhanced IP mode, the number of supported IP channels is increased. 2 IP cameras up to 4 MP are supported (max. 6 after turning off all analog channels), but the support for smart events on analog channels is disabled and the resolution of the HDMI/VGA video outputs is limited to 1080p. It can be started only while having a direct access to the DVR menu.

H.265 / H.265 video compression+



The DVR can record one or two video streams (primary and/or secondary) from each channel. The video can be compressed using the **H.265** method. Compared with its predecessor (H.264), H.265 can reduce the data stream by half, which translates into proportional disk space savings and extended data retention time. H.265+ can further minimize the streams in typical video surveillance scenarios.

Motion detection 2.0



The motion detection system 2.0 can analyze detection events in terms of human or vehicle detection. Thanks to that, alarm notifications are filtered and unnecessary alarms are blocked. Recordings can be filtered for human or vehicle detection.

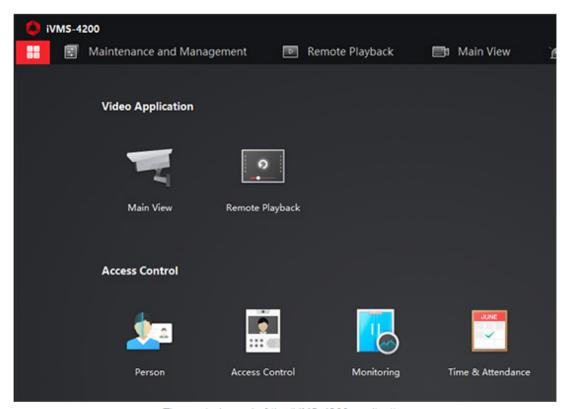


Artificial intelligence plays a key role in CCTV systems. Cameras and recorders with AcuSense technology analyze the image based on a deep learning algorithm. They reflect the structure and principles of the human brain. As in the brain, learning creates connections between artificial neurons (programs) and creates a multi-layer artificial neural network. The algorithm individually analyzes model photos and recordings, looking for common features, and then creates appropriate connections. The so-called layers, responsible for detecting a specific feature, are built this way. The more layers an algorithm has, the more accurate the analysis is. Therefore, teaching with large amounts of data is crucial. Only multi-layer networks can collect information and perform appropriate actions, in particular automatic extraction and representation of features (patterns) present in the data, teaching the network for example to recognize faces, vehicle brands, animal species or incident, e.g. a fall. This model of DVR has 4 channels with AcuSense function.

On **two** selected analog channels, it is possible to run virtual line crossing detection (together with line crossing direction determination) and intrusion detection in a quadrant area. Events can be filtered for human or vehicle detection.

Sophisticated client software

The <u>iVMS 4200</u> client software enables users to manage Hikvision devices in IP networks. The software enables the configuration and management of NVRs/DVRs, IP and analog cameras in hybrid systems. The iVMS 4200 utility can remotely manage up to 256 devices on up to 4 monitors. One monitor can display images from up to 64 cameras. Aside from system configuration and live monitoring, the utility can be used for remote playback, notifications, two-way audio transmission, and multi-level e-maps.



The control panel of the iVMS-4200 application

<u>Hik-Connect</u> is a mobile application intended for smartphones with the Android and iOS operating systems. It can be used for the remote live viewing of footage from DVRs, NVRs, network cameras via Wi-Fi, 2G, or 3G networks, as well as the playback of recorded video files. The application connects to the devices by IP addresses and/or through the P2P cloud service.

Working in the cloud

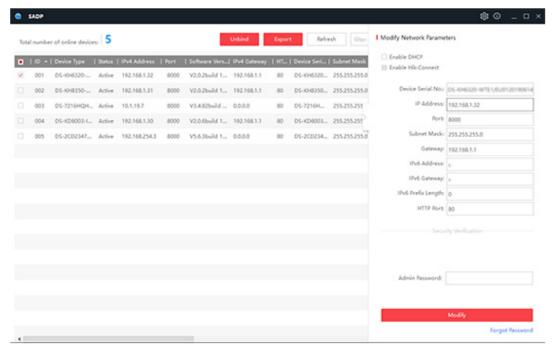
<u>Hik-Connect</u> is also the name of a network service intended for Hikvison devices. The service relies on P2P cloud computing for remote viewing via smartphones and tablets, and provides extensive monitoring and basic configuration options: live viewing (multiple channels), PTZ control, digital zoom, acoustic monitoring, playback of archival video, and alarm notifications (intrusion, line crossing, etc.).

Main features of the Hik-Connect service:

- only basic network configuration is required,
- no external IP address or port forwarding are needed,
- . p2p connection via the cloud or smartphone client application Android, iOS,
- · image encryption.

Advanced applications for organizing and operating CCTV systems

Various applications intended for the installers and operators/users of video surveillance systems based on Hikvision devices are described in our library.



The main window of the SADP software

SADP (Search Active Device Protocol) is a free, easy-to-use utility designed to search for Hikvision IP cameras and DVRs/NVRs in the local network. The network device search tool can also be used to modify device network parameters, e.g. to change or recover default passwords. Detailed information on the software, its use and password recovery (par. 8) can be found in the following article: SADP application - LAN tool for organizing CCTV systems based on Hikvision devices.

Specifications:

Model			iDS-7204HUHI-M1/S(C)
Product code			M75534
Product type			Analog HD DVR
Brand			Hikvision
Series			AcuSense
		Par	ameters
Number of analog channels			4
Number of IP channels			1 (2 in Enhanced IP mode)
Number of IP channels with the analog channels off			5 (6 in Enhanced IP mode)
Live display		fps	25
Recording	Video compression		H.265+/H.265/H.264+/H.264/MPEG4
	Frame rate	fps	12 for 5 MP
			15 for 4 MP
			18 for 3 MP (1080p)
			25 for 2 MP (1080p)
			25 for WD1/4CIF
	Single video channel bitrate		32 Kbps - 10 Mbps
	Audio compression		G.711u
	Audio channel bitrate		64 Kbps
PoC support			-
Event handling			Motion detection, video loss, tamper (camera blinding)
	HDMI 1		1920 x 1080
	HDMI 1 HDMI 2		1920 x 1080
Max. output		р	1920 x 1080 - 1920 x 1080
Max. output resolution	HDMI 2	р	-
	HDMI 2 VGA 1	р	-
	HDMI 2 VGA 1 VGA 2 BNC	р	- 1920 x 1080 -
resolution	HDMI 2 VGA 1 VGA 2 BNC nodes	p No. of channels	- 1920 x 1080 - 704 × 576 parallel HDMI1/VGA1
resolution Video output n	HDMI 2 VGA 1 VGA 2 BNC nodes	No. of	- 1920 x 1080 - 704 × 576 parallel HDMI1/VGA1 independent CVBS
video output n	HDMI 2 VGA 1 VGA 2 BNC nodes back Synchronous	No. of	- 1920 x 1080 - 704 × 576 parallel HDMI1/VGA1 independent CVBS
resolution Video output n	HDMI 2 VGA 1 VGA 2 BNC nodes back Synchronous playback Number of SATA II	No. of	- 1920 x 1080 - 704 × 576 parallel HDMI1/VGA1 independent CVBS 4
video output n	HDMI 2 VGA 1 VGA 2 BNC nodes back Synchronous playback Number of SATA II interfaces Number of eSATA	No. of	- 1920 x 1080 - 704 × 576 parallel HDMI1/VGA1 independent CVBS 4
Video output n	HDMI 2 VGA 1 VGA 2 BNC nodes back Synchronous playback Number of SATA II interfaces Number of eSATA interfaces Max. HDD	No. of channels	- 1920 x 1080 - 704 × 576 parallel HDMI1/VGA1 independent CVBS 4 4

		Other	interfaces
Ethernet			1 x RJ-45 10/100/1000 Base-T
Serial interfaces			RS-485
Heb	2.0		2 (front and back)
USB	3.0		-
Alarm	Input		-
	Output		-
Audio	Input		1 channels, RCA (2.0 Vp-p,1 kΩ)
	Output		1 channel, RCA (linear,1 kΩ)
		Smar	t functions
AcuSense	False alarm filter		2
Face detection and analysing	Face detection		-
	Capturing photos		-
	Photo comparison alarm		-
	Photo searching		-
VCA (virtual line crossing, area entry)			2 channels
		C	Others
Applications			iVMS-4200, iVMS-5200, iVMS-4500, Hik- Connect (Android, iOS), Hik-Central
Archiving			USB, remote
Network protocols			TCP/IP, PPPoE, DHCP, Hik-Connect, DNS, DDNS, NTP, SADP, NFS, ISCSI, UPnP, HTTPS, ONVIF
Other functions			-
Power supply	AC	V	-
		W	-
	DC	V	12
		W	18
Operating temperature		°C	-10+ 55
Humidity		%	95 or less (non-condensing)
Dimensions (W x D x H)		mm	315 x 242 x 45
Height		U	-
Weight		kg	1.2