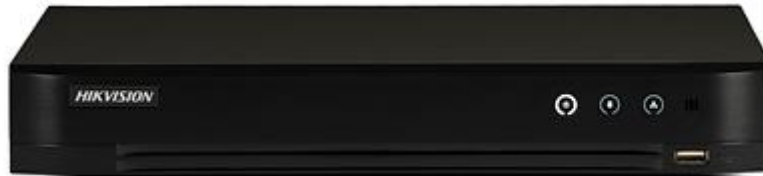


HIKVISION
TURBO HD 1080P
BY HIKVISION



Front view



Rear view



The included accessories

Key features:

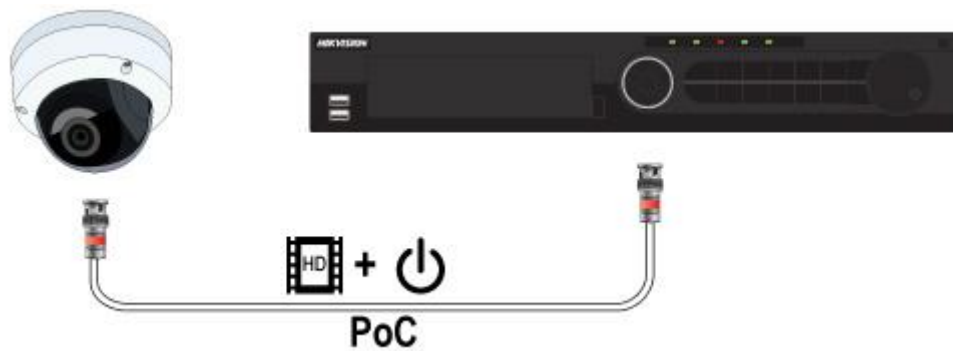
- HD-TVI: **1080p and 720p** recording resolution at 15 fps (**channel 1 can support 3 MP @ 15 fps**); WD1 and lower resolutions at 25 fps
- AHD, HD-CVI: **2 MP** recording resolution at 15 fps
- 1080p lite recording mode: 960x1080 at 25 fps
- Support for 4 HD-TVI, AHD or CVBS cameras and one IP camera (max. 4 MP, from Hikvision or compliant with Onvif)
- **PoC** - Power over Coax (power supply for cameras over video cables)
- H265 and H.265+ video compression
- Management via IE browser
- Channel 0 - possibility to monitor all cameras with minimum demand for network bandwidth
- Parallel operation of HDMI and VGA outputs up to 1920 x 1080 pixels
- CVBS video output

- Searching recordings by alarm events
- VCA - Video Content Analysis function
- Digital zooming during live monitoring and playback
- Synchronous playback from 4 channels
- Support for IPv4, IPv6,
- Monitoring the statuses of LAN, cameras, hard drives

Hikvision DS-7204HQHI-K1/P is a 4-channel CCTV DVR capable of recording surveillance video provided in HD-TVI, AHD, HD-CVI, CVBS and IP standards. The maximum recording resolution is 1080p@15fps, however channel 1 can support 3MP@15fps. In the case of VGA / WD1 / 4CIF / CIF resolutions, the maximum frame rate is 25 fps.

PoC - Power over Coax

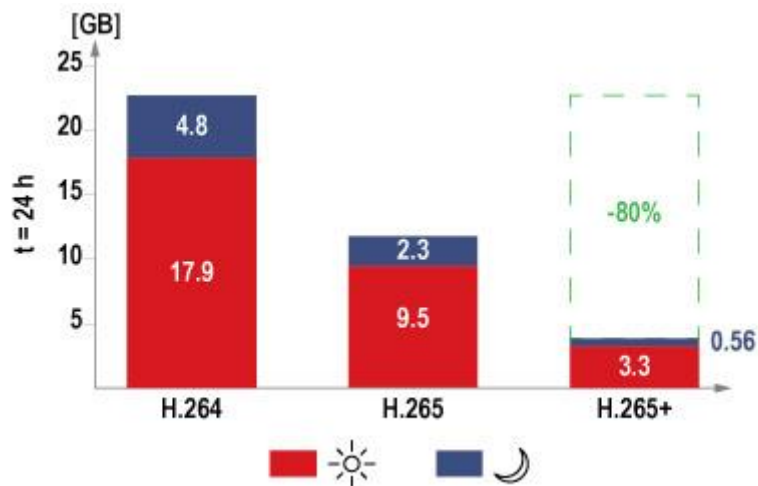
The DVR has a PoC (Power over Coax) function that enables remote powering of 4 cameras operating in the PoC.af system (power up to 6 W) or 2 cameras with PoC.at requirements (power up to 12 W). The video transmission from a PoC camera to the DVR and power supply from the DVR to the camera is carried out by the same coaxial or twisted pair cable. The transmission of power requires negotiation of the power supply conditions - non-PoC cameras will not be powered, but can normally transmit video images.



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 with the use **H.265** method. Compared with the predecessor (H.264), H.265 can reduce by half the data stream, which translates into proportional savings of the disk space or extended data retention time. H.265+ can further minimize the streams in typical video surveillance scenarios.



Special recording modes

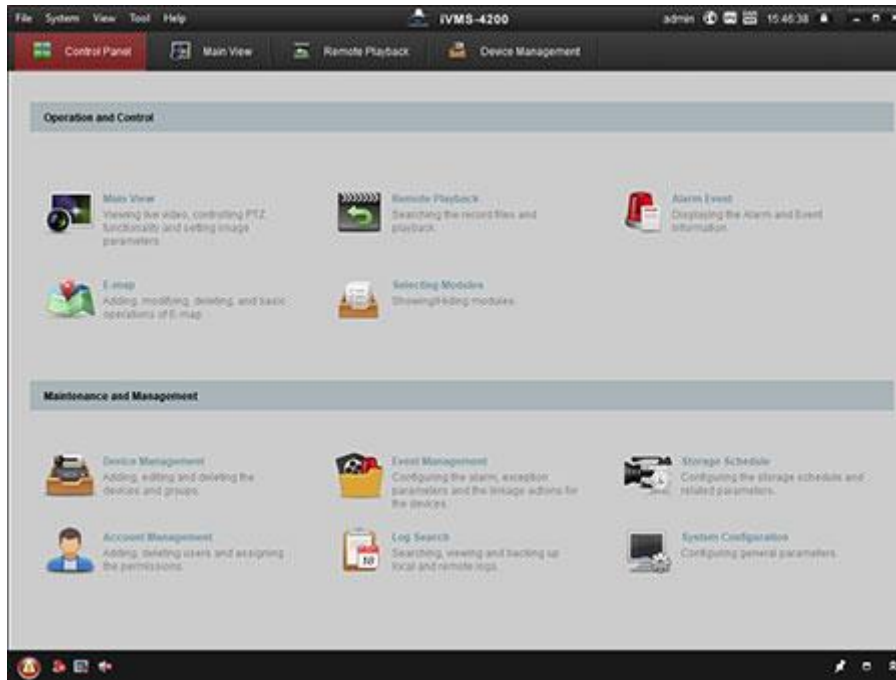
The recording can be performed in different modes: continuous, motion detection (with pre- and post-event recording), alarm (with pre- and post-event recording), or continuous recording with special parameters in the case of specific events. Each channel can be configured individually in this aspect. It is possible to increase the frame and bit rates, independently of the continuous recording settings. After the occurrence of an event (motion detection, camera tampering etc), the NVR automatically switches to the event-recording mode (usually with higher parameters). During the rest of the time the recording is carried out in the continuous mode. The increased parameters just before and after the event allow to play back every second of the period with high detail and smoothness, while the recordings between events may have a much lower performance, taking significantly less space on the storage media.

Intelligent image analysis

Two selected channels have the possibility of independent settings for intelligent image analysis (VCA). The video content analysis includes detection of virtual boundary line trespass (including direction), and detection of intrusion to an area of a square shape. The image quality diagnostic function can e.g. send email or alarm message on a worsened focus, excessive brightness or discoloration.

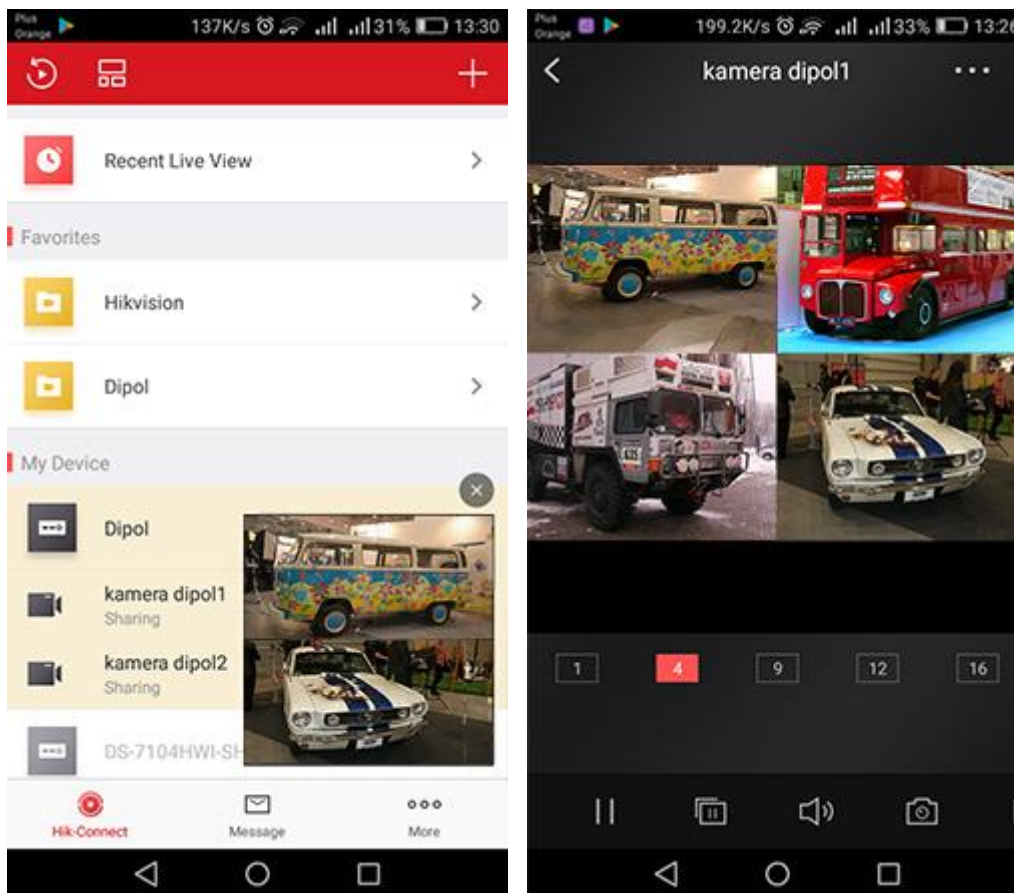
Refined client software

The **iVMS 4200** client software enables users of HIKVISION devices to manage them in IP networks. The software allows for configuration and management of NVRs/DVRs, IP and analog cameras (in hybrid systems). The iVMS 4200 utility can remotely manage up to 256 devices, with the use of up to 4 monitors. One monitor can display up images from up to 64 cameras. Aside from system configuration and live monitoring, the utility can be used for remote playback, notifying, two-way audio transmission, creating multi-level e-maps.



View of the control panel of the iVMS-4200 application

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



*The start menu of the Hik-Connect app
with live view thumbnail*

The live view screen

Working in the cloud



Hik-Connect is also the name of network service intended for Hikvision devices. The service is based on data processing in the cloud and integrates the following functions:

- Remote access through the cloud

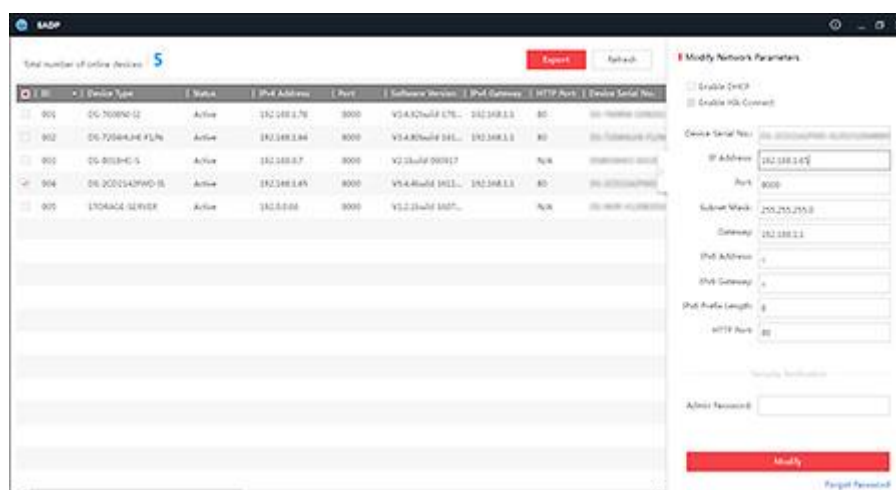
It allows access to the device without having an external IP address and when simplicity is the most important thing. Only the basic configuration of the network is required. The application on a PC or smartphone connects with the device via P2P cloud service.

- DDNS server

DDNS assigns a fixed domain name to dynamically changing IP addresses (Dynamic DNS). This feature is useful when the ISP does not provide users with a fixed IP address. The condition for using DDNS is having a public IP address and providing access from the external network to the appropriate ports of the NVR (server and http, by default 8000 and 80). The connection is possible via a web browser, client application on a PC and on smartphones.

Advanced applications for organizing and operating video surveillance systems

This article provides an overview of applications dedicated for installers and users of Hikvision-based video surveillance systems.



Main window of SADP application

SADP (Search Active Device Protocol) is a free and simple to use utility for searching Hikvision IP cameras and **Hikvision** DVRs/NVRs in the local network. The network device search tool can also be used for modification of network parameters of the Hikvision devices, including the change of passwords

or recovery of default passwords. Detailed information on the software and its use is contained in the [SADP application - LAN tool for organizing CCTV systems based on Hikvision devices](#) article.

Specifications:

Name/model	DS-7204HQHI-K1/P	
Code	M75605	
Video formats	HD-TVI, AHD, HD-CVI, CVBS, IP	
Video inputs	4x BNC + LAN (IP channel)	
Video outputs	HDMI, VGA, CVBS	
HDMI/VGA resolutions	1080p: 1920x1080 SXGA: 1280x1024 720p: 1280x720 XGA 1024x768	
Audio input / output connectors	RCA 1 / 1	
Alarm inputs / outputs	-	
Alarms and exceptions	Motion detection, video loss, camera tampering	
Live monitoring	25 fps	
Recording options	5 MP	-
	3 MP	15 fps
	1080p	15 fps
	720p	15 fps
	WD1/4CIF	25 fps
	CIF	25 fps
Video bit rate range (single channel)	32 kbps - 10 Mbps	
Audio bit rate	64 kbps	
HDD capacity & interface	1 x max 8 TB SATA HDD	
S.M.A.R.T. monitoring tools	YES	
NAS/SAN compatibility	YES (NAS)	
External ports	2x USB 2.0; RJ-45 (10M / 100M Auto); RS-485	
Secondary stream	WD1, 4CIF, CIF, QVGA, QCIF	

Network protocols	TCP/IP; DHCP; DDNS; PPPoE; email; NTP; SNMP; UPnP
Software ports	Server - 8000 HTTP - 80 RTSP - 554
Remote monitoring	Internet Explorer
PTZ protocols	Yes
Archiving	USB storage device, remote server
Power input	48 VDC (dedicated PSU)
Operating temperature	-10°C...55°C
Operating humidity	10%...90%
Dimensions (W x D x H)	315 x 242 x 45 mm