

# TURBO HD DVR



## Features and Functions

### Video Input and Transmission

- Self-adaptive HDTV/HDCVI/AHD/CVBS signal input
- Up to 2-ch 4 MP IP cameras input
- Long distance transmission over UTP and coaxial cable: max. 800m for 1080p and 1200m for 720p HDTV signal

### Compression and Recording

- H.265+/H.265/H.264+/H.264 encoding for the main stream, and H.265/H.264 for the sub-stream of analog cameras
- Connectable to H.265+/H.265/H.264+/H.264 IP cameras
- H.265+ can be enabled to improve encoding efficiency and reduce data storage costs
- Up to 3 MP resolution for recording
- Supports real-time 1080p lite and when enabled, the image effect is similar with 1080p

### Video Output

- Simultaneous HDMI/VGA output
- HDMI output at up to 4K (3840 × 2160) resolution for DS-7216HQHI-K1
- Separate CVBS output

### Storage and Playback

- 1 SATA interface (up to 6 TB capacity per HDD)
- 4/8/16-ch synchronous playback
- Smart search for efficient playback
- Supports the 3<sup>rd</sup> party cloud storage (Dropbox/Google Drive/Microsoft OneDrive)

### Smart Function

- Supports multiple VCA (Video Content Analytics) events for both analog and smart IP cameras
- DS-7204/7208HQHI-K1 support 2-ch line crossing detection and intrusion detection; DS-7216HQHI-K1 supports 2-ch line crossing detection and intrusion detection, and 1-ch sudden scene change detection
- VQD (Video Quality Diagnostics)
- Supports PTZ control via Omnicast VMS of Genetec protocol

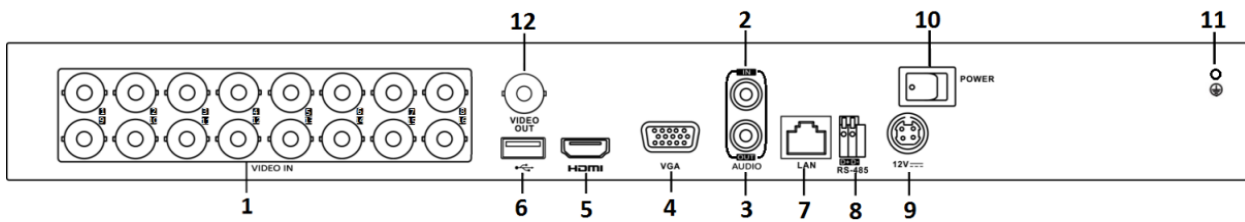
### Network & Ethernet Access


- Hik-Connect & DDNS (Dynamic Domain Name System) for easy network management
- 1 RJ45 10M/100M Ethernet network interface for DS-7204/7208HQHI-K1, and 1 RJ45 10M/100M/1000M Ethernet network interface for DS-7216HQHI-K1
- Output bandwidth limit configurable

## Specifications

Model				
Video/Audio input	<b>Video compression</b>	H.265+/H.265/H.264+/H.264		
	<b>Analog video input</b>	4-ch	8-ch	16-ch
		BNC interface (1.0 Vp-p, 75 Ω), supporting coaxitron connection		
	<b>HDTV input</b>	3 MP, 1080p30, 1080p25, 720p60, 720p50, 720p30, 720p25 <b>Note:</b> The 3 MP signal input is only available for channel 1 of DS-7204HQHI-K1, for channel 1/2 of DS-7208HQHI-K1, and for channel 1/2/3/4 of DS-7216HQHI-K1.		
	<b>AHD input</b>	1080p25, 1080p30, 720p25, 720p30		
	<b>HDCVI input</b>	1080p25, 1080p30, 720p25, 720p30		
	<b>CVBS input</b>	PAL/NTSC		
	<b>IP video input</b>	1-ch	2-ch	2-ch
		Up to 4 MP resolution Supports H.265+/H.265/H.264+/H.264 IP cameras		
	<b>Audio compression</b>	G.711u		
<b>Audio input</b>	1-ch, RCA (2.0 Vp-p, 1 KΩ)			
<b>CVBS output</b>	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480			
Video/Audio output	<b>HDMI/VGA output</b>	1-ch, 1920 × 1080/60Hz, 1280 × 1024/60Hz, 1280 × 720/60Hz, 1024 × 768/60Hz		<b>VGA:</b> 1-ch, 1920 × 1080/60Hz, 1280 × 1024/60Hz, 1280 × 720/60Hz, 1024 × 768/60Hz <b>HDMI:</b> 1-ch, 4K (3840 × 2160)/30Hz, 2K (2560 × 1440)/60Hz, 1920 × 1080/60Hz, 1280 × 1024/60Hz, 1280 × 720/60Hz, 1024 × 768/60Hz
		When 1080p Lite mode not enabled: 3 MP/1080p/720p/VGA/WD1/4CIF/CIF; When 1080p Lite mode enabled: 3 MP/1080p lite/720p lite/VGA/WD1/4CIF/CIF		
	<b>Encoding resolution</b>	When 1080p Lite mode not enabled: 3 MP/1080p/720p/VGA/WD1/4CIF/CIF; When 1080p Lite mode enabled: 3 MP/1080p lite/720p lite/VGA/WD1/4CIF/CIF		
	<b>Frame rate</b>	Main stream: When 1080p Lite mode not enabled: For 3 MP stream access: 3 MP/1080p/720p/VGA/WD1/4CIF/CIF@5fps For 1080p stream access: 1080p/720p@15fps; VGA/WD1/4CIF/CIF@25fps (P)/30fps (N) For 720p stream access: 720p/VGA/WD1/4CIF/CIF@25fps (P)/30fps (N) When 1080p Lite mode enabled: 3 MP@15fps 1080p lite/720p lite/VGA/WD1/4CIF/CIF@25fps (P)/30fps (N)		
		Sub-stream: WD1/4CIF@12fps; CIF@25fps (P)/30fps (N)		
	<b>Video bit rate</b>	32 Kbps to 6 Mbps		
	<b>Audio output</b>	1-ch, RCA (Linear, 1 KΩ)		
	<b>Audio bit rate</b>	64 Kbps		
	<b>Dual stream</b>	Support		
	<b>Stream type</b>	Video, Video & Audio		
<b>Synchronous playback</b>	4-ch	8-ch	16-ch	
Network management	<b>Remote connections</b>	128		
	<b>Network protocols</b>	TCP/IP, PPPoE, DHCP, Hik-Connect, DNS, DDNS, NTP, SADP, NFS, iSCSI, UPnP, HTTPS, ONVIF		
Hard disk	<b>SATA</b>	1 SATA interface		
	<b>Capacity</b>	Up to 6 TB capacity for each disk		
External interface	<b>Two-way audio input</b>	1-ch, RCA (2.0 Vp-p, 1 KΩ) (using the 1 <sup>st</sup> audio input)		
	<b>Network interface</b>	1, RJ45 10M/100M self-adaptive Ethernet interface		1, RJ45 10M/100M/1000M self-adaptive Ethernet interface
		<b>USB interface</b>		2 × USB 2.0 Front panel: 1 × USB 2.0 Rear panel: 1 × USB 3.0
	<b>Serial interface</b>	RS-485 (half-duplex)		
General	<b>Power supply</b>	12 VDC		
	<b>Consumption (without HDD)</b>	≤ 6 W	≤ 7.5 W	≤ 25 W
		<b>Working temperature</b>		
	<b>Working humidity</b>	-10 °C to +55 °C (+14 °F to +131 °F)		
	<b>Dimensions (W × D × H)</b>	10% to 90%		
	<b>Weight (without HDD)</b>	315 × 242 × 45 mm (12.4 × 9.5 × 1.8 inch)		
≤ 1.16 kg (2.6 lb)		≤ 1.78 kg (3.9 lb)	≤ 2 kg (4.4 lb)	

## Physical Interfaces



 **NOTE** The rear panel of 4/8 provides 4/8 video input interfaces.

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