

DS-7600HI-ST Series HDVR

Introduction:

DS-7600HI-ST series HDVR (Hybrid Digital Video Recorder) is a new generation recorder developed by Hikvision independently which can both connect analog and network cameras and provide powerful surveillance. Combined with multiple advanced technologies, such as audio and video encoding & decoding technology, embedded system technology, storage technology, network technology and intelligent technology. It can both work alone as a recorder and cooperate with other devices to build a comprehensive surveillance system. The DS-7600HI-ST series HDVR are widely applied in the areas of finance, public security, military, communication, transportation, education, etc..

Available Models:

DS-7604HI-ST, DS-7608HI-ST, DS-7616HI-ST.

Main Features:

- Connectable to the third-party network cameras like ACTI, Arecont, AXIS, Brickcom, Bosch, Canon, PANASONIC, Pelco, SAMSUNG, SANYO, SONY, Vivotek and ZAVIO;
- Live view, storage and playback of video at up to 5MP resolution;
- Simultaneous HDMI, VGA and CVBS outputs; HDMI output and VGA output at up to 1920×1080P resolution.
- New GUI and supports starting record with one key;
- Redundant recording, holiday recording and capture schedule configuration;
- Instant playback for assigned camera during multi-channel live view mode;
- Support up to 16-ch synchronous playback at WD1 resolution; and reverse playback for multi-camera;
- Smart search for the selected area in the video.
- Customization of tags, searching and playing back by tags;
- Locking and unlocking record files;
- Support HDD quota and group management; different capacity can be assigned to different cameras under quota mode;
- Provide up to 2 SATA interfaces for record;
- 1 self-adaptive network interfaces.
- Support Hikvision DDNS (Dynamic Domain Name System);
- Support Channel-zero encoding to decrease the bandwidth requirement when viewing multiple cameras.
- Network detection function;
- Adopt pioneering dual-OS design to ensure the security of system running.



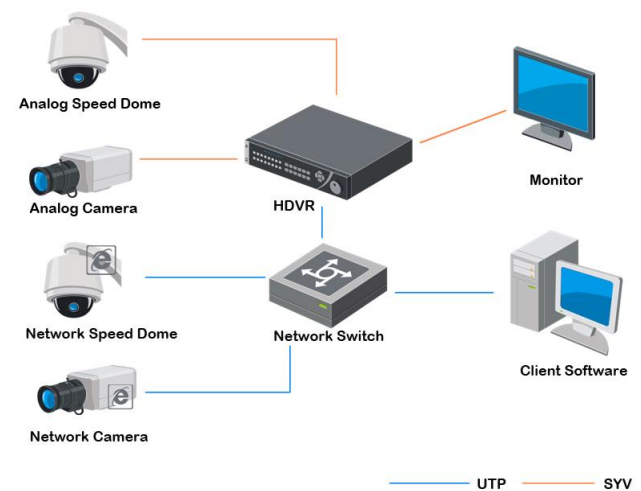
Physical Interfaces:

DS-7600HI-ST



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

Typical Application:



Specifications:

Model	DS-7604HI-ST	DS-7608HI-ST	DS-7616HI-ST	
Video/Audio input	Analog video input	4-ch	8-ch	16-ch
		BNC (1.0 Vp-p, 75 Ω), PAL / NTSC self-adaptive		
	IP video input	Up to 8-ch	Up to 16-ch	Up to 32-ch
	Composite video input	Up to 8-ch (Analog video + IP video)	Up to 16-ch (Analog video + IP video)	Up to 32-ch (Analog video + IP video)
	Audio input	1-ch	4-ch	
	RCA (2.0 Vp-p, 1 KΩ)			
	Incoming bandwidth	20 Mbps	40 Mbps	80 Mbps
Video/Audio output	HDMI / VGA output	1920 × 1080 / 60 Hz (1080P), 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		
	Audio output	1-ch, RCA (Linear, 1 KΩ)		
	Max. remote connection	128-ch		
	Outgoing bandwidth	40 Mbps	240 Mbps	240 Mbps
Encoding/Decoding Parameters	Video compression	H.264		
	Encoding resolution	Main stream: WD1 / 4CIF / 2CIF / CIF / QCIF Sub-stream: CIF / QCIF		
	Frame rate	Main stream: 25 fps (P) / 30 fps (N) Sub-stream: 25 fps (P) / 30 fps (N)		
	Video bitrate	32 Kbps ~ 3 Mbps		
	Audio compression	G.711	OggVorbis	
	Audio bitrate	64 Kbps		
	Stream type	Video, Video & Audio		
	Dual-stream	Support		
	Playback resolution	5MP/3MP/1080p/UXGA/720P/WD1/4CIF/VGA/DCIF/2CIF/CIF/QCIF		
	Synchronous playback	8-ch	16-ch	16-ch
Record	Record/Capture mode	Manual recording/capture, Continuous recording/capture, Motion detection record/capture, Alarm record/capture, Motion Alarm record/capture, Motion & Alarm record/capture		
	Playback mode	Instant playback, Normal playback, Event playback, Tag playback, Picture playback (not available for 7604HI-ST)		
	Backup mode	Normal backup, Event backup, Picture backup (not available for 7604HI-ST)		
Network	Protocol	IPv6, HTTPS, UPnP™, SNMP, NTP, SADP, SMTP, NFS, iSCSI, PPPoE, etc.		
Hard disk	Type	1 SATA interface	2 SATA interfaces	
	Capacity	Up to 4 TB capacity for each disk		
External interface	Two-way audio	1-ch, RCA (2.0 Vp-p, 1 KΩ) (Using audio input)		
		1		
	Network interface	10M/100M self-adaptive Ethernet interface	10M/100M/1000M self-adaptive Ethernet interface	
	Serial interface	1 RS-485 half-duplex interface		
	USB port	2 × USB2.0		
	Alarm in/out	Optional		
General	Power supply	12 VDC		
	Consumption (without hard disk)	Max. 10W		
	Working temperature	-10 °C ~ +55 °C (14 °F ~ 131 °F)		
	Working humidity	10%~90%		
	Chassis	1U chassis	1U chassis	
	Dimensions (W × D × H)	315 × 230 × 45 mm (12.4 × 9.0 × 1.8 in)	445 × 290 × 45 mm (17.5 × 11.4 × 1.8 in)	
	Weight	Approx. 2 kg / 4.4 lb (without hard disk)		

Note:

The formula to calculate the incoming bandwidth and the IPC connected is: $A = B/(C+D)$.

A refers to the number of IP camera you connected.

B refers to the value of the incoming bandwidth.

C refers to the bitrate value of the main stream of the connected IPC.

And D refers to the bitrate value of the sub-stream of the connected IPC.

Example: The incoming bandwidth of 7616HI-ST HDVR is 80Mbps and the IPC to connect is with resolution of 720P (1280*720) / 25 (30) fps. The bitrate for the main stream and sub-stream of the IPC is set as 4Mbps and 1Mbps respectively. In this example, $B=80\text{Mbps}$, $C=4\text{Mbps}$, $D=1\text{Mbps}$ and $A = B/(C+D) = 80 / (4+1) = 16$. So the number of IP cameras can be connected with is 16.