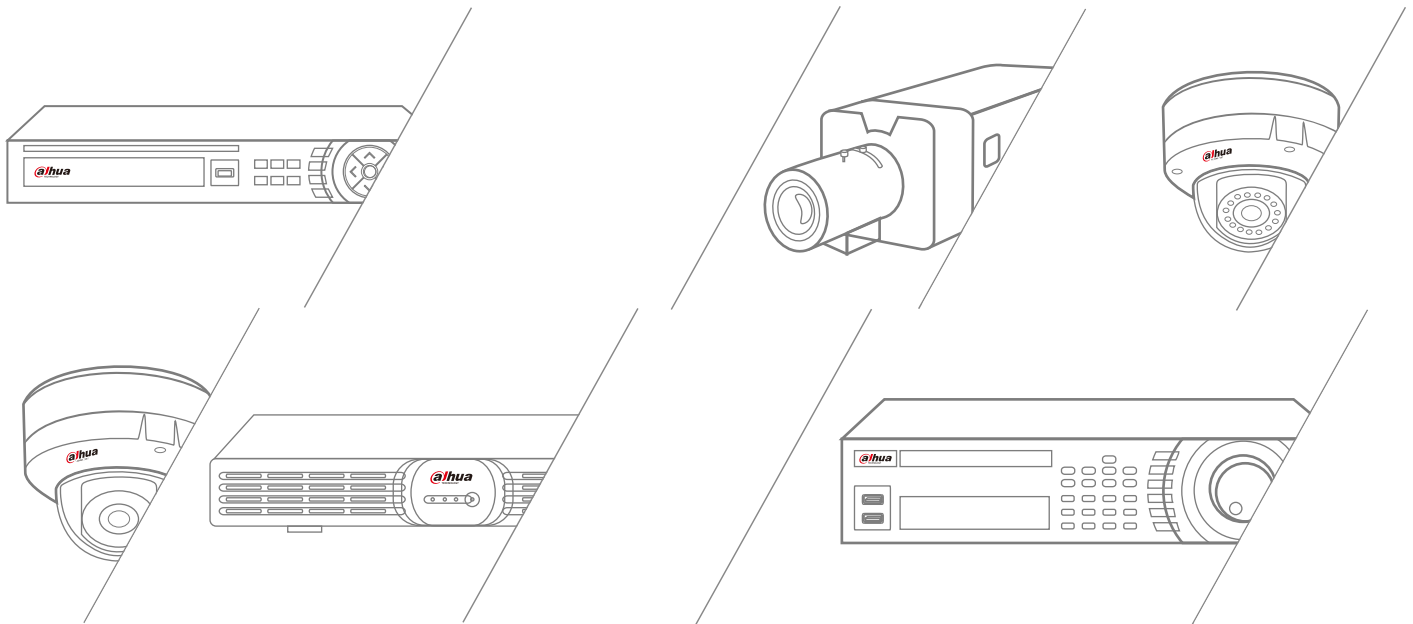


# HDCVI

## HDCVI PRODUCT CATALOG



# Company Overview

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Dahua Technology is a world-leading and advanced video surveillance solution provider. The company's product portfolios include the advanced series of front-end, back-end, display, software as well as intelligent traffic solution. Dahua was the first company in China to launch 8-channel real-time embedded digital video recorder in 2001. Since then, the company keeps on investing and building strong R&D capabilities for new technology and innovation. With nearly investing 10% of sales revenue every year, Dahua has a more than 2000 professionals in R&D team, aiming to provide the cutting edge products with high quality and performance. To create win-win situation and to maximize customers' values are always our priorities.

Dahua has established sales, marketing and service network locally and globally. Besides offices in mainland China, the company also has offices or sales representatives in Asia, the Americas, Europe, Oceania, Africa and others, responding to the market with the best service and products. Meanwhile, Dahua provides the industry leading "three-year" warranty in

China's market. To-date, Dahua's products are widely applied in many fields, such as banking, public security, energy, telecommunication, intelligent-building and intelligent-transportation. Numerous major projects have been installed with Dahua's solutions, for example, the Three Gorges Hydropower Plant, Six-Country Summit, Olympic Venues, Shanghai World Expo, Kremlin Palace, Paris Charles de Gaulle Airport and London Underground as well as many others.

Dahua Technology owns 264 patents, including 13 invention patents. In China, Dahua Technology is a Safety City project recommended brand and one of China's most influential security companies. At international front, the company has been awarded "Top 10 Security Brand in China" for 9 years and has been ranking in "Security 50" by a&s magazine for 5 years. Moreover, Dahua enjoyed 6th largest market share according to 2012 IMS global report.

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# HDCVI Technology

## Overview

Dahua Technology releases High Definition Composite Video Interface (HDCVI) technology of Independent Intellectual Property Rights. HDCVI is a video transmission technology in high definition via coaxial cable, allowing reliable long-distance HD transmission at lower cost, while complex deployment is applicable.

HDCVI modulates video signal to level and then transmit by adopting base-band and quadrature amplitude modulation; which is also the reason of its naming. This technology avoids the cross talk of CVBS and completely separates the brightness signal and hue signal, hence further enhances video quality.

HDCVI offers two specifications — 1920H (1920×1080) and 1280H (1280×720); which are compatible with the industrial standard 1080p(1920×1080) and 720p(1280×720). In addition, the technology features a patent named auto signal compensation (ASC), which only allows an extremely low signal distortion along long-distance transmission.

HDCVI solution incorporates both cameras and DVRs, and the system is star topology structured; DVR is served as a node to have an over coax P2P (Point-to-Point) transmission to camera. Cable selection is based on transmission distance: cable 75-3 and 75-5 are recommended for transmission within 500 meters, cable 75-5 and above for over 500 meters. Connector or jointing technology could be applied for connecting and the installation is exactly the same as that of conventional analog devices, which posts no special requirements either for indoor or outdoor scenarios with better anti-interference capability offered.

To further realize multiple-signal transmission over one cable, both audio signal and dual-way data communication signal are embedded in a blanking zone; which enhances the synchronization with video signal; and max supports 44.1kHz sampling rate thanks to ASC.

The forward and reverse data channels composite in the frame blanking zone, realizing a two-way end-to-end transmission to support control commands such as camera focus, PTZ control, real-time alarm and etc. The forward outputting data supports high transmission baud rate as the sending time and electric signal baud rate are predictable, meanwhile, the receiving end is of high ASC performance; on the other hand, the reverse outputting data supports lower baud rate due to its low signal frequency and limited data, which is effected by the impedance matching. However, with ASC adopted, the reverse channel could restore electric signal during long-distance transmission at some degree.

Therefore, HDCVI is an optimal solution for megapixel high definition application, featuring non-latent long-distance transmission at lower cost.

## HDCVI Chip

Dahua HDCVI chip comprises transmitting chip (TX) and receiving chip (RX), which are designed for front-end HDCVI cameras and DVRs, respectively; Chips could also be applied in fiber optic transceiver, distributor, matrix as well.

## Transmitting Chip (TX)

TX interfaces includes BT1120/BT656 digital video interface, I2S audio interface and I2C configuration interface, which are all of industrial standard design, allowing TX chip to use any standard interface for ISPs and audio chips on the market.

As for analog output, in addition to HDCVI format, the TX chip is also compatible with CVBS.

The TX chip supports 1280H@25fps/30fps/50fps/60fps and 1920H@25fps/30fps.

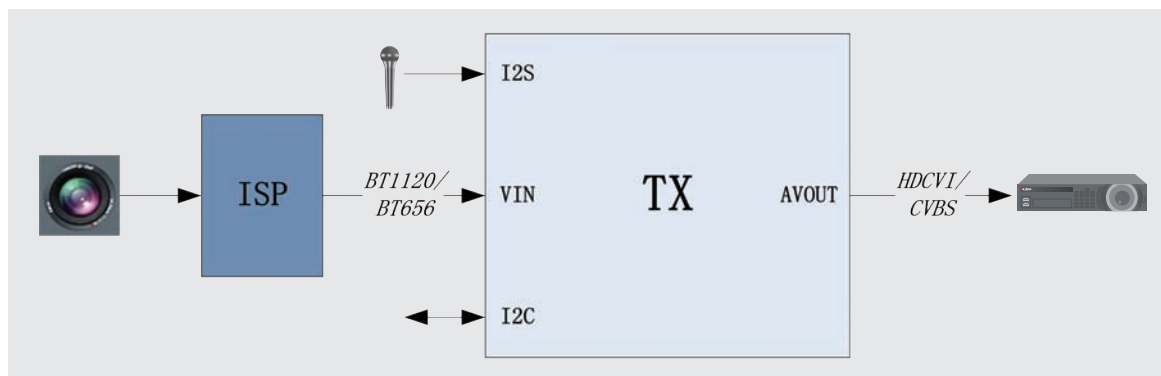


Figure 1 TX Flow Chart

The figure above shows the simplicity of HDCVI solution with TX chip adopted; its tiny size of the chip also makes itself quite suitable for the application in all kinds of camera sizes.

## Receiving Chip (RX)

The RX chip supports HDCVI HD inputs and digital video outputs; I2S audio output, multiple-chip audio cascade output as well as I2C configuration interface; it also supports flexible mapping of HDCVI video input channel and digital output channel; each channel is of its own format and built-in equalizer, supporting video parameters setup such as brightness, contrast, hue, saturation, dual-way control signal transmission.

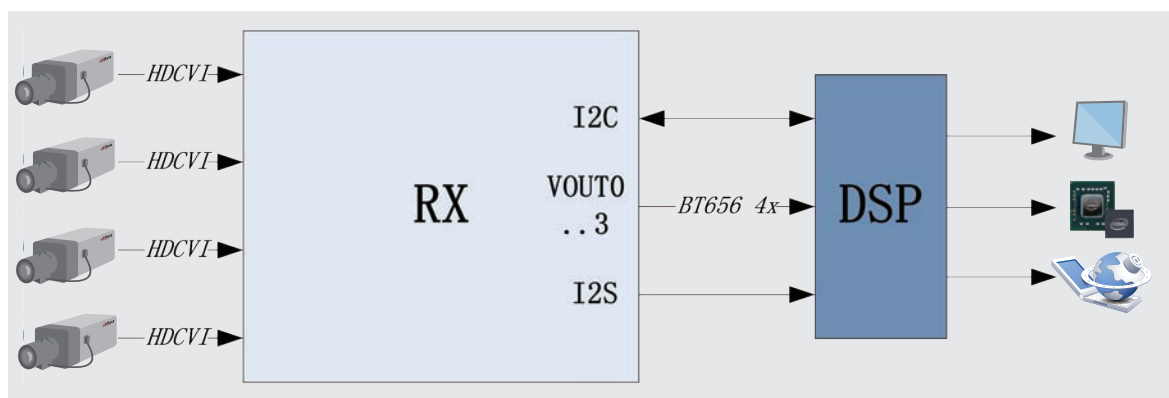


Figure 2 RX Flow Chart

As seen in Figure 2, RX chip has the same interface as AD chip in a conventional analog DVR, which is to say that it provides seamless integration with conventional DVRs; and the built-in equalizer allows HDCVI DVR to receive HD video signal up to 500 meters. The TX chip supports 1280H@25fps/30fps/50fps/60fps and 1920H@25fps/30fps.

In a word, with minor changes done on conventional cameras and DVRs shall the manufacturers embrace a brand-new HDCVI solution, which levels up image quality dramatically, but at a lower cost.

# HDCVI Function

## HDCVI VS. HD-SDI

### Longer Transmission Distance

Both HDCVI and HD-SDI can transfer HD signal @720p/1080p, but HDCVI has a distinguished advantage at the transmission distance. With general transmission media, HD-SDI reaches 100 meters at most while HDCVI, at least, transmits 500 meters by using 75-3 cable and featuring low signal distortion rate.

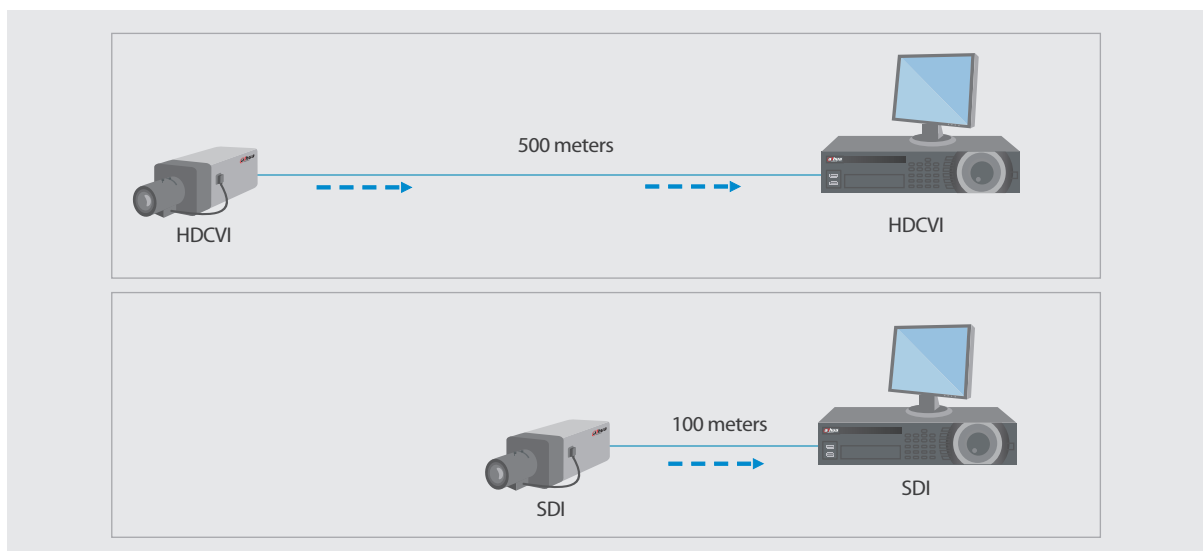


Figure 3 Contrast on Transmission Distance

### Better Anti-Interference Capability

The anti-interference capability of HD-SDI solution is relatively poor when been placed against high-frequent radiation environment, which could lead to higher bit error ratio while the HDCVI adopts low-frequency modulation technology, making it free from the high-frequency wireless electric radiation to ensure stable video transmission at high image quality.

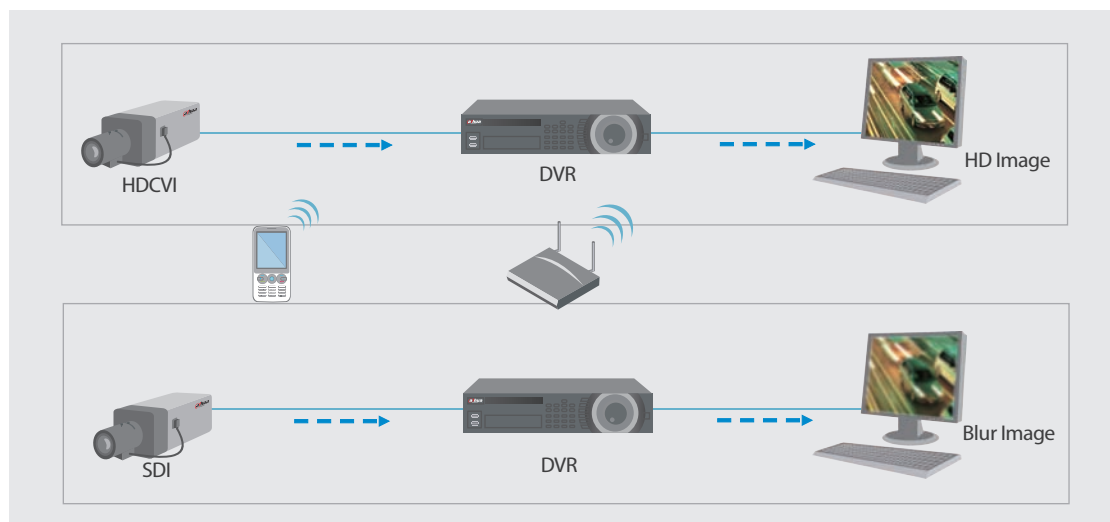


Figure 4 Anti-Interference Capability

## HDCVI VS. IP

### Reliability

HDCVI adopts P2P transmission to ensure a smooth and reliable transmission; while the transmission of network camera is based on Ethernet and thus may lead to network jitter and packet loss.

### Real-time

The network HD features video buffer technology and the delay is controlled within 300 milliseconds in the general and fair networking environment; However, HDCVI features no latency capability for an outstanding real-time performance.

### No Compression

For HDCVI, there is no compression processed to maintain its original effect and thus present in vivid image quality.

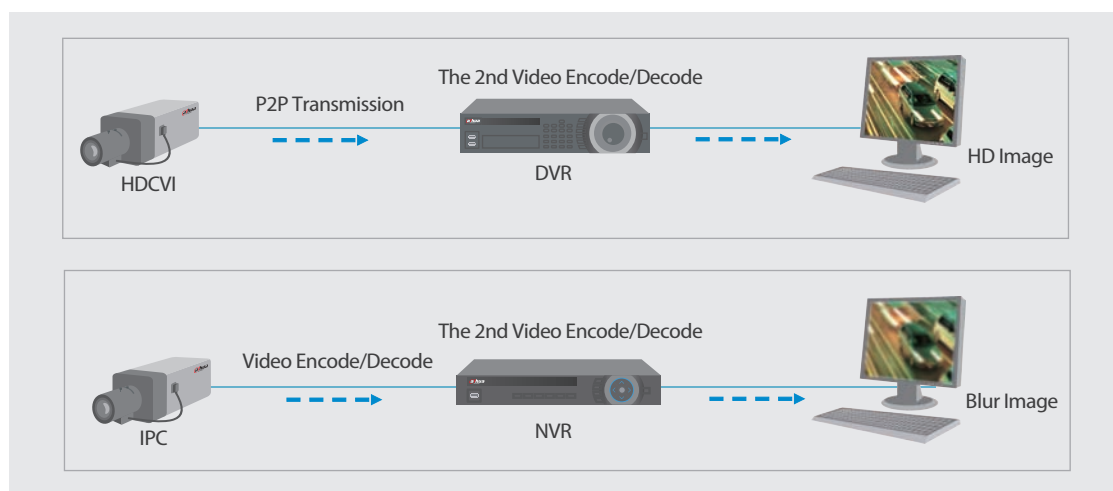


Figure 5

## Highlights

### Lower Cost

Unlike HD-SDI, which posts high demands on cabling and installation; HDCVI solution inherits the same installing means of conventional analog solutions, which is of great convenience and also decrease the cost.

### Smart control

As HDCVI transmits multiple-signal (video/audio and dual-way data) over one cable, it realizes video/audio synchronized transmission and reverse-signal transmission control at the same time, such as PTZ and zoom control; which further simplifies the installation.

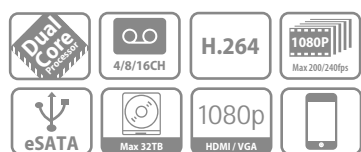


# HDCVI DVR



# DH-HCVR7804/7808/7816S

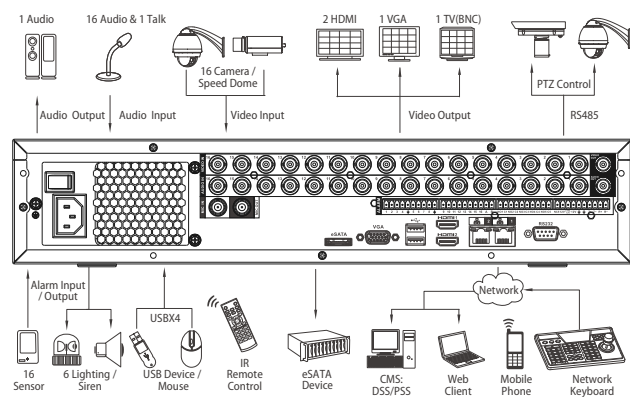
## 4/8/16 All Channel 1080P 2U Standalone DVR



### Features

- Up to 4/8/16 channel video 1080p realtime live view
- H.264 dual-stream video compression
- HCVR7804/7808/7816S: All channel 1080p
- HDMI / VGA / TV simultaneous video output
- 4/8/16 channel synchronous playback, GRID interface & smart search
- 3D intelligent positioning with Dahua PTZ camera
- Support 8 SATA HDDs up to 32TB, 1 eSATA up to 16TB, 4 USB2.0
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS

### System Connection



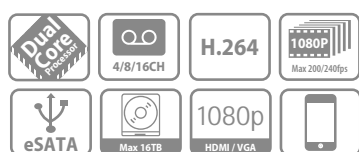
\* Takes HCVR7816S as an example

### Technical Specifications

Model	DH-HCVR7804S	DH-HCVR7808S	DH-HCVR7816S
<b>System</b>			
Main Processor	Embedded processor		
Operating System	Embedded LINUX		
<b>Video</b>			
Input	4 channel, BNC	8 channel, BNC	16 channel, BNC
Standard	NTSC(525Line, 60f/s), PAL(625Line, 50f/s)		
<b>Audio</b>			
Input	4 channel, BNC	8 channel, BNC	16 channel, BNC
Output	1 channel, BNC		
Two-way Talk	1 channel input, 1 channel output, BNC		
<b>Display</b>			
Interface	2 HDMI, 1 VGA, 1BNC		
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768		
Display Split	1/4	1/4/8/9	1/4/8/9/16
Privacy Masking	4 rectangular zones (each camera)		
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording		
<b>Recording</b>			
Video/Audio Compression	H.264 / G.711		
Resolution	1080P(1920×1080/1920×900)/720P(1280×720/1280×600)/960H(960×576/960×480)/D1/4CIF(704×576/704×480) / CIF(352×288/352×240) / QCIF(176×144/176×120)		
Record Rate	Main stream	1080P/720P/960H/D1/HD1/2CIF/CIF(1~25/30fps)	
	Extra stream	CIF/QCIF(1~25/30fps)	
Bit Rate	48~8192Kb/s		
Record Mode	Manual, Schedule(Regular(Continuous), MD, Alarm), Stop		
Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec		
<b>Video Detection &amp; Alarm</b>			
Trigger Event	Recording, PTZ, Tour, Alarm, Video Push, Email, FTP, Spot, Buzzer & Screen tips		
Video Detection	Motion Detection, MD Zones: 396(22×18), Video Loss & Camera Blank		
Alarm Input	4 channel	8 channel	16 channel
Relay Output	6 channel		
<b>Playback &amp; Backup</b>			
Sync Playback	1/4	1/4/8	1/4/8/16
Search Mode	Time/Date, Alarm, MD & Exact search (accurate to second), Smart search		
Playback Functions	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom		
Backup Mode	USB Device / eSATA Device / Internal SATA burner/ Network		
<b>Network</b>			
Ethernet	2RJ-45 port (10/100M/1000M)		
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter, Alarm Server		
Max. User Access	128 users		
Smart Phone	iPhone, iPad, Android, Windows Phone		
<b>Storage</b>			
Internal HDD	8 SATA ports (8HDDs or 6HDDs+1CD/DVD-RW), up to 32TB		
External HDD	1 eSATA port (Max 4 SATA HDDs), up to 16TB		
<b>Auxiliary Interface</b>			
USB Interface	4 ports (2 Rear), USB2.0		
RS232	1 port, For PC communication & Keyboard		
RS485	1 port, For PTZ control, 1port for keyboard		
<b>General</b>			
Power Supply	AC 100~240 V, 50/60 Hz		
Power Consumption	40W(without HDD)		
Working Environment	-10 ~+55°C / 10~90%RH / 86~106kpa		
Dimension(W×D×H)	2U, 440mm×460mm×89mm		
Weight	6.5kg(without HDD)		

# DH-HCVR7404/7408/7416L

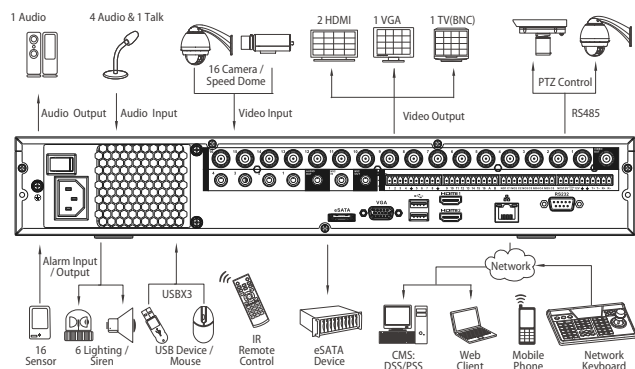
## 4/8/16 All Channel 1080P 1.5U Standalone DVR



### Features

- Up to 4/8/16 cameras with 1080p realtime preview
- H.264 dual-stream video compression
- HCVR7404/7408/7416L: All channel 1080P
- HDMI / VGA / TV simultaneous video output
- All channel synchronous playback, GRID interface & smart search
- 3D intelligent positioning with Dahua PTZ dome camera
- Support 4 SATA HDD up to 16TB, 1 eSATA up to 16TB, 3 USB2.0
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS

### System Connection



\* Takes HCVR7416L as an example

### Technical Specifications

Model	DH-HCVR7404L	DH-HCVR7408L	DH-HCVR7416L
<b>System</b>			
Main Processor	Embedded processor		
Operating System	Embedded LINUX		
<b>Video</b>			
Input	4 channel, BNC	8 channel, BNC	16 channel, BNC
Standard	NTSC(525Line, 60f/s), PAL(625Line, 50f/s)		
<b>Audio</b>			
Input	4 channel, BNC		
Output	1 channel, BNC		
Two-way Talk	1 channel input, 1 channel output, BNC		
<b>Display</b>			
Interface	2 HDMI, 1 VGA, 1BNC		
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768, 800×600		
Display Split	1/4	1/4/8/9	1/4/8/9/16
Privacy Masking	4 rectangular zones (each camera)		
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording		
<b>Recording</b>			
Video/Audio Compression	H.264 / G.711		
Resolution	1080P(1920×1080/1920×900)/720P(1280×720/1280×600)/960H(960×576/960×480)/D1/4CIF(704×576/704×480)/CIF(352×288/352×240)/QCIF(176×144/176×120)		
Record Rate	Main stream	1080P/720P/960H/D1/HD1/2CIF/CIF(1~25/30fps)	
	Extra stream	CIF/QCIF(1~25/30fps)	
Bit Rate	48~8192Kb/s		
Record Mode	Manual, Schedule(Regular(Continuous), MD), Stop		
Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec		
<b>Video Detection &amp; Alarm</b>			
Trigger Event	Recording, PTZ, Tour, Video Push, Email, FTP, Spot, Buzzer & Screen tips		
Video Detection	Motion Detection, MD Zones: 396(22×18), Video Loss & Camera Blank		
Alarm Input	4 channel	8 channel	16 channel
Relay Output	6 channel		
<b>Playback &amp; Backup</b>			
Sync Playback	1/4	1/4/8	1/4/8/16
Search Mode	Time/Date, MD & Exact search (accurate to second)		
Playback Functions	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom		
Backup Mode	USB Device / eSATA Device / Internal SATA burner / Network		
<b>Network</b>			
Ethernet	RJ-45 port (10/100M/1000M)		
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter		
Max. User Access	128 users		
Smart Phone	iPhone, iPad, Android, Windows Phone		
<b>Storage</b>			
Internal HDD	4 SATA port, up to 16TB		
External HDD	1 eSATA port (Max 4 SATA HDDs), up to 16TB		
<b>Auxiliary Interface</b>			
USB Interface	3 ports(2 Rear), USB2.0		
RS232	1 port, For PC communication & Keyboard		
RS485	1 port, For PTZ control		
<b>General</b>			
Power Supply	AC 100~240 V, 50/60 Hz		
Power Consumption	40W(without HDD)		
Working Environment	-10 ~ +55°C / 10~90%RH / 86~106kpa		
Dimension(W×D×H)	1.5U, 440mm×460mm×68mm		
Weight	6.0kg(without HDD)		

# DH-HCVR7204/7208A

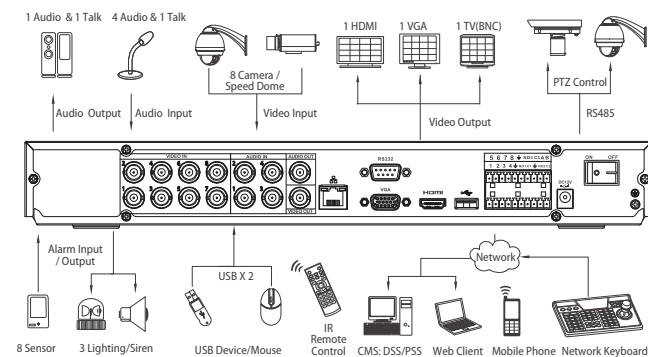
## 4/8 All Channel 1080P 1U Standalone DVR



### Features

- Up to 4/8 cameras with 1080p realtime preview
- H.264 dual-stream video compression
- HCVR7204/7208A: All channel 1080P
- HDMI / VGA / TV simultaneous video output
- 4/8 channel synchronous playback, GRID interface & smart search
- 3D intelligent positioning with Dahua PTZ dome camera
- Support 2 SATA HDD up to 8TB, 2 USB2.0
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS

### System Connection



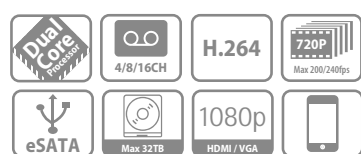
\* Takes HCVR7208A as an example

### Technical Specifications

Model	DH-HCVR7204A	DH-HCVR7208A
<b>System</b>		
Main Processor	Embedded processor	
Operating System	Embedded LINUX	
<b>Video</b>		
Input	4 channel, BNC	8 channel, BNC
Standard	NTSC(525Line, 60f/s), PAL(625Line, 50f/s)	
<b>Audio</b>		
Input	4 channel, BNC	
Output	1 channel, BNC	
Two-way Talk	Reuse audio input/output channel 1	
<b>Display</b>		
Interface	1 HDMI, 1 VGA, 1BNC	
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768, 800×600	
Display Split	1/4	1/4/8/9
Privacy Masking	4 rectangular zones (each camera)	
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording	
<b>Recording</b>		
Video/Audio Compression	H.264 / G.711	
Resolution	1080P(1920×1080/1920×900)/(720P(1280×720/1280×600)/960H(960×576/960×480)/D1/4CIF(704×576/704×480)/CIF(352×288/352×240)/QCIF(176×144/176×120)	
Record Rate	Main stream	1080P/720P/960H/D1/HD1/2CIF/CIF(1~25/30fps)
	Extra stream	CIF/QCIF(1~25/30fps)
Bit Rate	48~8192Kb/s	
Record Mode	Manual, Schedule(Regular(Continuous), MD), Stop	
Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec	
<b>Video Detection &amp; Alarm</b>		
Trigger Event	Recording, PTZ, Tour, Video Push, Email, FTP, Spot, Buzzer & Screen tips	
Video Detection	Motion Detection, MD Zones: 396(22×18), Video Loss & Camera Blank	
Alarm Input	4 channel	8 channel
Relay Output	3 channel	
<b>Playback &amp; Backup</b>		
Sync Playback	1/4	1/4/8
Search Mode	Time/Date, MD & Exact search (accurate to second)	
Playback Functions	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom	
Backup Mode	USB Device / Network	
<b>Network</b>		
Ethernet	RJ-45 port (10/100M/1000M)	
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter	
Max. User Access	128 users	
Smart Phone	iPhone, iPad, Android, Windows Phone	
<b>Storage</b>		
Internal HDD	2 SATA port, up to 8TB	
<b>Auxiliary Interface</b>		
USB Interface	2 ports (1 Rear), USB2.0	
RS232	1 port, For PC communication & Keyboard	
RS485	1 port, For PTZ control	
<b>General</b>		
Power Supply	DC12V/5A	
Power Consumption	15W(without HDD)	
Working Environment	-10 ~ +55°C / 10~90%RH / 86~106kpa	
Dimension(W×D×H)	1U, 375mm×285mm×45mm	
Weight	2.35kg (without HDD)	

# DH-HCVR5804/5808/5816S

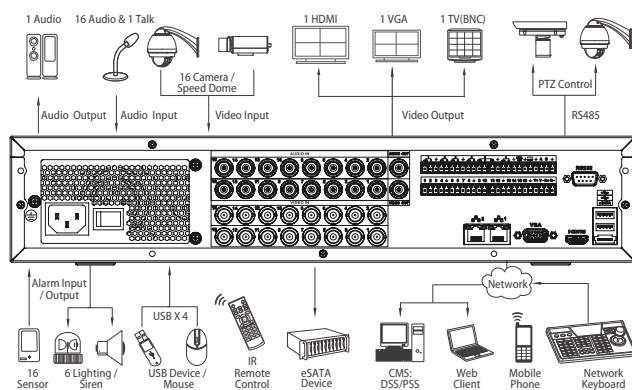
## 4/8/16 All Channel 720P 2U Standalone DVR



### Features

- Up to 4/8/16 channel video 1080p realtime live view
- H.264 dual-stream video compression
- HCVR5804/5808/5816S: All channel 720p
- HDMI / VGA / TV simultaneous video output
- 4/8/16 channel synchronous playback, GRID interface & smart search
- 3D intelligent positioning with Dahua PTZ camera
- Support 8 SATA HDDs up to 32TB, 1 eSATA up to 16TB, 4 USB2.0
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS

### System Connection



\* Takes HCVR5816S as an example

### Technical Specifications

Model	DH-HCVR5804S	DH-HCVR5808S	DH-HCVR5816S
<b>System</b>			
Main Processor	Embedded processor		
Operating System	Embedded LINUX		
<b>Video</b>			
Input	4 channel, BNC	8 channel, BNC	16 channel, BNC
Standard	NTSC(525Line, 60f/s), PAL(625Line, 50f/s)		
<b>Audio</b>			
Input	4 channel, BNC	8 channel, BNC	16 channel, BNC
Output	1 channel, BNC		
Two-way Talk	Reuse audio input/output channel 1		
<b>Display</b>			
Interface	1 HDMI, 1 VGA, 1 BNC		
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768		
Display Split	1/4	1/4/8/9	1/4/8/9/16
Privacy Masking	4 rectangular zones (each camera)		
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording		
<b>Recording</b>			
Video/Audio Compression	H.264 / G.711		
Resolution	720P(1280×720/1280×600)/960H(960×576/960×480)/D1/4CIF(704×576/704×480) / CIF(352×288/352×240) / QCIF(176×144/176×120)		
Record Rate	Main stream	720P/960H/D1/HD1/2CIF/CIF(1~25/30fps)	
	Extra stream	CIF/QCIF(1~25/30fps)	
Bit Rate	48~6144Kb/s		
Record Mode	Manual, Schedule(Regular(Continuous), MD, Alarm), Stop		
Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec		
<b>Video Detection &amp; Alarm</b>			
Trigger Event	Recording, PTZ, Tour, Alarm, Video Push, Email, FTP, Spot, Buzzer & Screen tips		
Video Detection	Motion Detection, MD Zones: 396(22×18), Video Loss & Camera Blank		
Alarm Input	4 channel	8 channel	16 channel
Relay Output	6 channel		
<b>Playback &amp; Backup</b>			
Sync Playback	1/2/4	1/2/4/8	1/2/4/8/16
Search Mode	Time/Date, Alarm, MD & Exact search (accurate to second), Smart search		
Playback Functions	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom		
Backup Mode	USB Device / Network		
<b>Network</b>			
Ethernet	2RJ-45 port (10/100M/1000M)		
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter, Alarm Server		
Max. User Access	128 users		
Smart Phone	iPhone, iPad, Android, Windows Phone		
<b>Storage</b>			
Internal HDD	8 SATA ports (8HDDs or 6HDDs+1CD/DVD-RW), up to 32TB		
External HDD	1 eSATA port (Max 4 SATA HDDs), up to 16TB		
<b>Auxiliary Interface</b>			
USB Interface	4 ports (2 Rear), USB2.0		
RS232	1 port, For PC communication & Keyboard		
RS485	1 port, For PTZ control, 1 port for Keyboard		
<b>General</b>			
Power Supply	AC 100~240 V, 50/60 Hz		
Power Consumption	25W	30W	40W
Working Environment	-10 ~ +55°C / 10~90%RH / 86~106kpa		
Dimension(W×D×H)	2U, 440mm×460mm×89mm		
Weight	6.5kg (without HDD)		

# DH-HCVR5404/5408/5416L

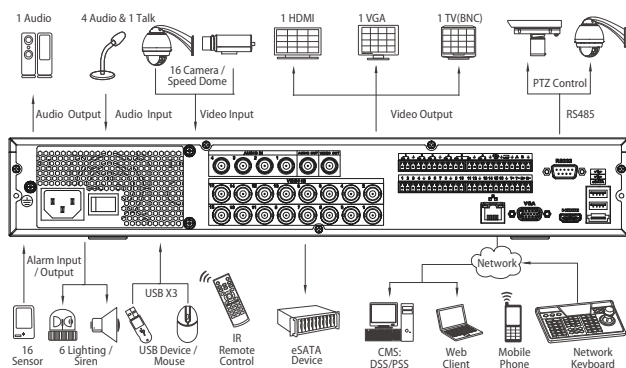
## 4/8/16 All Channel 720P 1.5U Standalone DVR



### Features

- Up to 4/8/16 cameras with 1080p realtime preview
- H.264 dual-stream video compression
- HCVR5404/5408/5416L: All channel 720P
- HDMI / VGA/BNC simultaneous video output
- All channel synchronous playback, GRID interface & smart search
- 3D intelligent positioning with Dahua PTZ dome camera
- Support 4 SATA HDD up to 16TB, 1 eSATA up to 16TB, 3 USB2.0
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS

### System Connection



### Technical Specifications

Model	DH-HCVR5404L	DH-HCVR5408L	DH-HCVR5416L
<b>System</b>			
Main Processor	Embedded processor		
Operating System	Embedded LINUX		
<b>Video</b>			
Input	4 channel, BNC	8 channel, BNC	16 channel, BNC
Standard	NTSC(525Line, 60f/s), PAL(625Line, 50f/s)		
<b>Audio</b>			
Input	4 channel, BNC		
Output	1 channel, BNC		
Two-way Talk	Reuse audio input/output channel 1		
<b>Display</b>			
Interface	1 HDMI, 1 VGA, 1BNC		
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768, 800×600		
Display Split	1/4	1/4/8/9	1/4/8/9/16
Privacy Masking	4 rectangular zones (each camera)		
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording		
<b>Recording</b>			
Video/Audio Compression	H.264 / G.711		
Resolution	720P(1280×720/1280×600)/960H(960×576/960×480)/D1/4CIF(704×576/704×480) / CIF(352×288/352×240) / QCIF(176×144/176×120)		
Record Rate	Main stream	720P/960H/D1/HD1/2CIF/CIF(1~25/30fps)	
	Extra stream	CIF/QCIF(1~25/30fps)	
Bit Rate	48~6144Kb/s		
Record Mode	Manual, Schedule(Regular(Continuous), MD), Stop		
Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec		
<b>Video Detection &amp; Alarm</b>			
Trigger Event	Recording, PTZ, Tour, Video Push, Email, FTP, Spot, Buzzer & Screen tips		
Video Detection	Motion Detection, MD Zones: 396(22×18), Video Loss & Camera Blank		
Alarm Input	4 channel	8 channel	16 channel
Relay Output	6 channel		
<b>Playback &amp; Backup</b>			
Sync Playback	1/4	1/4/8	1/4/8/16
Search Mode	Time/Date, MD & Exact search (accurate to second)		
Playback Functions	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom		
Backup Mode	USB Device / Network		
<b>Network</b>			
Ethernet	RJ-45 port (10/100M/1000M)		
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter		
Max. User Access	128 users		
Smart Phone	iPhone, iPad, Android, Windows Phone		
<b>Storage</b>			
Internal HDD	4 SATA port, up to 16TB		
External HDD	1 eSATA port (Max 4 SATA HDDs), up to 16TB		
<b>Auxiliary Interface</b>			
USB Interface	3 ports (2 Rear), USB2.0		
RS232	1 port, For PC communication & Keyboard		
RS485	1 port, For PTZ control		
<b>General</b>			
Power Supply	AC 100~240 V, 50/60 Hz		
Power Consumption	25W	30W	40W
Working Environment	-10 ~+55°C / 10~90%RH / 86~106kpa		
Dimension(W×D×H)	1.5U, 440mm×460mm×68mm		
Weight	6.0kg (without HDD)		

\*Takes HCVR5416L as an example

# DH-HCVR5204/5208/5216A

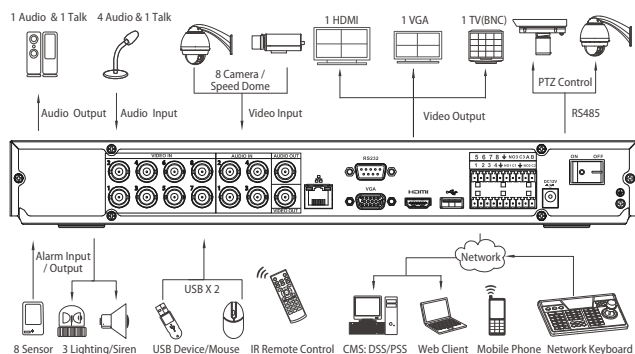
## 4/8/16 All Channel 720P 1U Standalone DVR



### Features

- Up to 4/8/16 cameras with 1080p realtime preview
- H.264 dual-stream video compression
- HCVR5204/5208/5216A: All channel 720P
- HDMI / VGA/BNC simultaneous video output
- 4/8/16 channel synchronous playback, GRID interface & smart search
- 3D intelligent positioning with Dahua PTZ dome camera
- Support 2 SATA HDD up to 8TB, 2 USB2.0
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS

### System Connection



\* Takes HCVR5208A as an example

### Technical Specifications

Model	DH-HCVR5204A	DH-HCVR5208A	DH-HCVR5216A
<b>System</b>			
Main Processor	Embedded processor		
Operating System	Embedded LINUX		
<b>Video</b>			
Input	4 channel, BNC	8 channel, BNC	16 channel, BNC
Standard	NTSC(525Line, 60f/s), PAL(625Line, 50f/s)		
<b>Audio</b>			
Input	4 channel, BNC		
Output	1 channel, BNC		
Two-way Talk	Reuse audio input/output channel 1		
<b>Display</b>			
Interface	1 HDMI, 1 VGA, 1 BNC		
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768, 800×600		
Display Split	1/4	1/4/8/9	1/4/8/9/16
Privacy Masking	4 rectangular zones (each camera)		
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording		
<b>Recording</b>			
Video/Audio Compression	H.264 / G.711		
Resolution	720P(1280×720/1280×600)/960H(960×576/960×480)/D1/4CIF(704×576/704×480) / CIF(352×288/352×240) / QCIF(176×144/176×120)		
Record Rate	Main stream	720P/960H/D1/HD1/2CIF/CIF(1~25/30fps)	
	Extra stream	CIF/QCIF(1~25/30fps)	
Bit Rate	48~6144Kb/s		
Record Mode	Manual, Schedule(Regular(Continuous), MD), Stop		
Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec		
<b>Video Detection &amp; Alarm</b>			
Trigger Event	Recording, PTZ, Tour, Video Push, Email, FTP, Spot, Buzzer & Screen tips		
Video Detection	Motion Detection, MD Zones: 396(22×18), Video Loss & Camera Blank		
Alarm Input	4 channel	8 channel	16 channel
Relay Output	3 channel		
<b>Playback &amp; Backup</b>			
Sync Playback	1/4	1/4/8	1/4/8/16
Search Mode	Time/Date, MD & Exact search (accurate to second)		
Playback Functions	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom		
Backup Mode	USB Device / Network		
<b>Network</b>			
Ethernet	RJ-45 port (10/100M/1000M)		
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter		
Max. User Access	128 users		
Smart Phone	iPhone, iPad, Android, Windows Phone		
<b>Storage</b>			
Internal HDD	2 SATA port, up to 8TB		
<b>Auxiliary Interface</b>			
USB Interface	2 ports(1 Rear), USB2.0		
RS232	1 port, For PC communication & Keyboard		
RS485	1 port, For PTZ control		
<b>General</b>			
Power Supply	DC12V/5A		
Power Consumption	15W(without HDD)		
Working Environment	-10 ~ +55°C / 10~90%RH / 86~106kpa		
Dimension(W×D×H)	1U, 375mm×285mm×45mm		
Weight	2.35kg (without HDD)		

# DH-HCVR5104/5108H

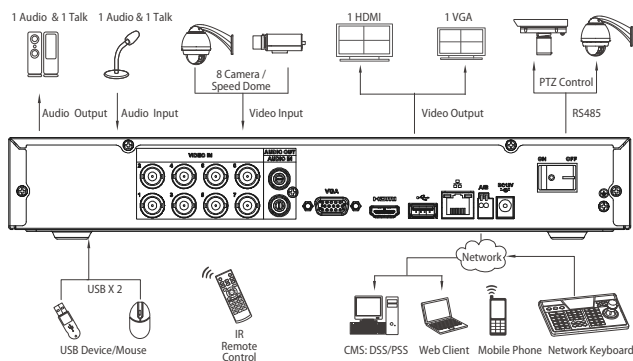
## 4/8 All Channel 720P Mini 1U Standalone DVR



### Features

- Up to 4/8 cameras with 1080p realtime preview
- H.264 dual-stream video compression
- HCVR5104/5108H: All channel 720P
- HDMI / VGA simultaneous video output
- All channel synchronous playback, GRID interface & smart search
- 3D intelligent positioning with Dahua PTZ dome camera
- Support 1 SATA HDD up to 4TB, 2 USB2.0
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS

### System Connection



\* Takes HCVR5108H as an example

### Technical Specifications

Model	DH-HCVR5104H	DH-HCVR5108H
<b>System</b>		
Main Processor	Embedded processor	
Operating System	Embedded LINUX	
<b>Video</b>		
Input	4 channel, BNC	8 channel, BNC
Standard	NTSC(525Line, 60f/s), PAL(625Line, 50f/s)	
<b>Audio</b>		
Input	1 channel, RCA	
Output	1 channel, RCA	
Two-way Talk	Reuse audio input/output channel 1	
<b>Display</b>		
Interface	1 HDMI, 1 VGA,	
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768, 800×600	
Display Split	1/4	1/4/8
Privacy Masking	4 rectangular zones (each camera)	
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording	
<b>Recording</b>		
Video/Audio Compression	H.264 / G.711	
Resolution	720P(1280×720/1280×600)/960H(960×576/960×480)/D1/4CIF(704×576/704×480) / CIF(352×288/352×240) / QCIF(176×144/176×120)	
Record Rate	Main Stream	720P/960H/D1/HD1/2CIF/CIF(1~25/30fps)
	Extra Stream	CIF/QCIF(1~25/30fps)
Bit Rate	48~6144Kb/s	
Record Mode	Manual, Schedule(Regular(Continuous), MD), Stop	
Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec	
<b>Video Detection &amp; Alarm</b>		
Trigger Events	Recording, PTZ, Tour, Video Push, Email, FTP, Spot, Buzzer & Screen tips	
Video Detection	Motion Detection, MD Zones: 396(22×18), Video Loss & Camera Blank	
<b>Playback &amp; Backup</b>		
Sync Playback	1/4	1/4/8
Search Mode	Time/Date, MD & Exact search (accurate to second)	
Playback Functions	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom	
Backup Mode	USB Device / Network	
<b>Network</b>		
Ethernet	RJ-45 port (10/100M)	
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter	
Max. User Access	128 users	
Smart Phone	iPhone, iPad, Android, Windows Phone	
<b>Storage</b>		
Internal HDD	1 SATA port, up to 4TB	
<b>Auxiliary Interface</b>		
USB Interface	2 ports(1 Rear), USB2.0	
RS485	1 port, For PTZ control	
<b>General</b>		
Power Supply	DC12V/2A	
Power Consumption	10W(without HDD)	
Working Environment	-10 ~ +55°C / 10~90%RH / 86~106kpa	
Dimension(W×D×H)	Mini 1U, 325mm×245mm×45mm	
Weight	1.5kg (without HDD)	



# HDCVI Camera



# DH-HAC-HFW2200E

## 2Megapixel 1080P Water-proof HDCVI IR-Bullet Camera



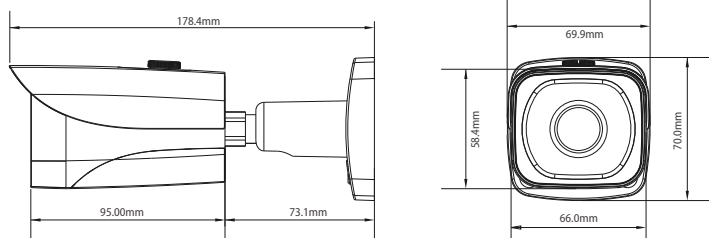
### Features

- 1/3" 2Megapixel CMOS
- 25/30fps@1080P, 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- Full HD and standard definition switch
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR
- 6mm fixed lens (2.8 mm, 3.6mm, 8mm optional)
- Max. IR LEDs length 20m, Smart IR
- IP66, DC12V

### Technical Specifications

Model	DH-HAC-HFW2200EP	DH-HAC-HFW2200EN
<b>Camera</b>		
Image Sensor	1/3" 2Megapixel CMOS	
Effective Pixels	1920(H)×1080(V)	
Electronic Shutter	1/3s~1/100,000s	
Video Frame Rate	1920×1080@25fps; 1920×1080@30fps; 1280×720@25 fps; 1280×720@30 fps; 1280×720@50 fps; 1280×720@60 fps	
Synchronization	Internal	
Mini. Illumination	0.05Lux@F1.2(AGC ON), 0Lux IR on	
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)	
<b>Camera Features</b>		
Max. IR LEDs Length	20m, Smart IR	
Day/Night	Auto(ICR) / Color / B/W	
Noise Reduction	2D/3D	
OSD Menu	Support	
<b>Lens</b>		
Focal length	6mm fixed lens (2.8mm, 3.6mm, 8mm optional)	
Mount Type	M12	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 4.5W	
Working Environment	-30°C~+60°C / Less than 95%RH (no condensation)	
Transmission Distance	Over 300m via 75-3 coaxial cable	
Ingress Protection	IP66	
Dimensions(W×D×H)	178.4mm×69.9mm×70.0mm	
Weight	0.5kg	

### Dimensions (mm)



# DH-HAC-HFW2200D

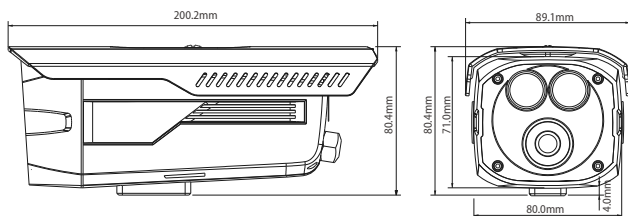
## 2Megapixel 1080P Water-proof IR HDCVI Camera



### Features

- 1/3" 2Megapixel CMOS
- 25/30fps@1080P, 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- HD and standard definition switch
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR
- 8mm fixed lens (3.6 mm, 6mm, 12mm, 16mm optional)
- Max. IR LEDs length 50m, Smart IR
- IP66, DC12V

### Dimensions(mm)



### Accessories (optional)



PFB120W

PFB121W

### Technical Specifications

Model	DH-HAC-HFW2200DP	DH-HAC-HFW2200DN
<b>Camera</b>		
Image Sensor	1/3" 2Megapixel CMOS	
Effective Pixels	1920(H)×1080(V)	
Electronic Shutter	1/3(s)~1/100,000s	
Video Frame Rate	1920×1080@25fps; 1920×1080@30fps; 1280×720@25fps; 1280×720@30fps; 1280×720@50 fps; 1280×720@60 fps	
Synchronization	Internal	
Min. Illumination	0.05Lux@F1.2(0Lux IR LED on)	
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)	
<b>Camera Features</b>		
Max. IR LEDs Length	50m, Smart IR	
Day/Night	Auto(ICR) / Color / B/W	
Noise Reduction	2D/3D	
OSD Menu	Support	
<b>Lens</b>		
Focal length	8mm fixed lens (3.6mm, 6mm, 12mm, 16mm optional)	
Mount Type	M12	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 8W	
Working Environment	-30°C~+60°C/ Less than 95%RH (no condensation)	
Transmission Distance	Over 300m via 75-3 coaxial cable	
Ingress Protection	IP66	
Dimensions(W×D×H)	Φ200.2mm×89.1mm×80.4mm	
Weight	0.45kg	

# DH-HAC-HFW2200B(-B)

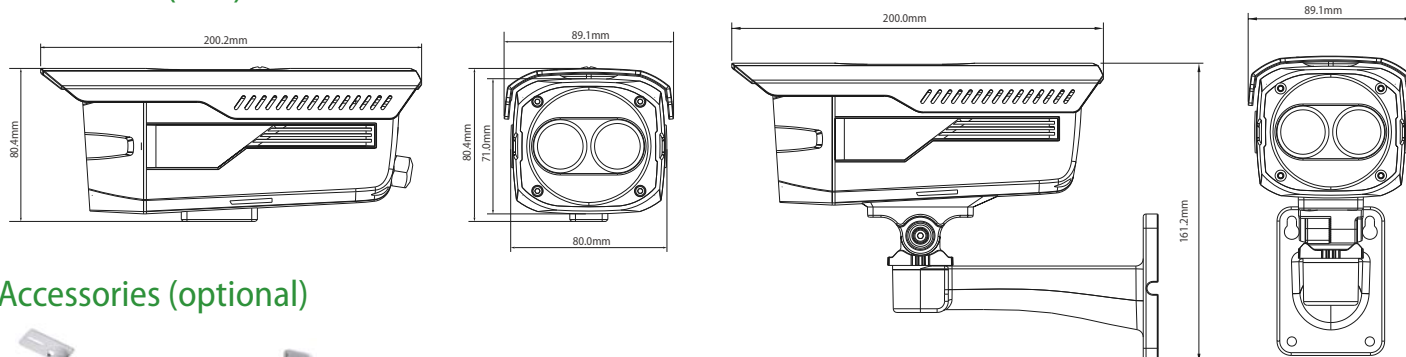
## 2Megapixel 1080P Water-proof IR HDCVI Camera



### Features

- 1/3" 2Megapixel CMOS
- 25/30fps@1080P, 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- HD and standard definition switch
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR
- 6mm fixed lens (2.8 mm, 3.6mm, 8mm optional)
- Max. IR LEDs length 30m, Smart IR
- IP66, DC12V
- Default with bracket (HFW2200B-B)

### Dimensions(mm)



### Accessories (optional)



### Technical Specifications

Model	DH-HAC-HFW2200BP	DH-HAC-HFW2200BN	DH-HAC-HFW2200BP-B	DH-HAC-HFW2200BN-B
<b>Camera</b>				
Image Sensor	1/3" 2Megapixel CMOS			
Effective Pixels	1920(H)×1080(V)			
Electronic Shutter	1/3s~1/100,000s			
Video Frame Rate	1920×1080@25fps; 1920×1080@30fps; 1280×720@25fps; 1280×720@30fps; 1280×720@50fps; 1280×720@60fps			
Synchronization	Internal			
Min. Illumination	0.05Lux@F1.2(0Lux IR LED on)			
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)			
<b>Camera Features</b>				
Max. IR LEDs Length	30m, Smart IR			
Day/Night	Auto(ICR)/B&W/Color			
Noise Reduction	3D/2D			
OSD Menu	Support			
<b>Lens</b>				
Focal length	6mm (2.8 mm, 3.6mm, 8mm optional)			
Mount Type	M12			
<b>General</b>				
Power Supply	DC12V±10%			
Power Consumption	Max 6.5W			
Working Environment	-30°C~+60°C Humidity is less than 95%(no condensation)			
Transmission Distance	Over 300m via 75-3 coaxial cable			
Ingress Protection	IP66			
Dimensions(W×D×H)	200.2mm×89.1mm×80.4mm		200mm×89.1mm×161.2mm	
Weight	0.45kg		0.58kg	
Others	N/A		Default: bracket included	

# DH-HAC-HFW2200S

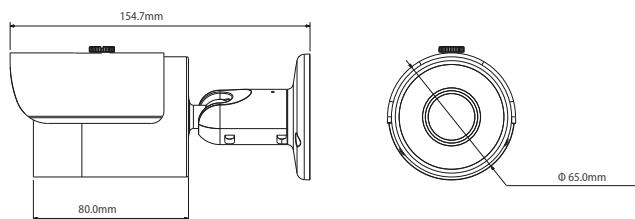
## 2Megapixel 1080P Water-proof IR HDCVI Camera



### Features

- 1/3" 2Megapixel CMOS
- 25/30fps@1080P, 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- HD and standard definition switch.
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR,
- 6mm fixed lens (2.8 mm, 3.6mm, 8mm optional)
- Max. IR LEDs length 20m, Smart IR
- IP66, DC12V

### Dimensions(mm)



### Accessories (optional)



PFA130

### Technical Specifications

Model	DH-CA-HFW2200SP	DH-CA-HFW2200SN
<b>Camera</b>		
Image Sensor	1/3" 2Megapixel CMOS	
Effective Pixels	1920(H)×1080(V)	
Electronic Shutter	1/3s~1/100,000s	
Video Frame Rate	1920×1080@25fps; 1920×1080@30fps; 1280×720@25fps; 1280×720@30 fps; 1280×720@50fps; 1280×720@60fps	
Synchronization	Internal	
Min. Illumination	0.05Lux@F1.2(0Lux IR LED on)	
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)	
<b>Camera Features</b>		
Max. IR LEDs Length	20m, Smart IR	
Day/Night	Auto(ICR)/B&W/Color	
Noise Reduction	2D/3D	
OSD Menu	Support	
<b>Lens</b>		
Focal length	6mm (2.8 mm, 3.6mm, 8mm optional)	
Mount Type	M12	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 4.5W	
Working Environment	-30°C~+60°C/ Less than 95%RH (no condensation)	
Transmission Distance	Over 300m via 75-3 coaxial cable	
Ingress Protection	IP66	
Dimensions(W×D×H)	Φ65mm×154.7mm	
Weight	0.38kg	
Others	Default: bracket included	

# DH-HAC-HDW2200C

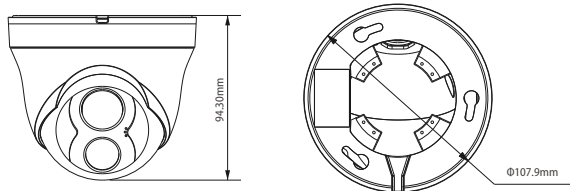
## 2Megapixel 1080P Water-proof IR HDCVI Mini Dome Camera



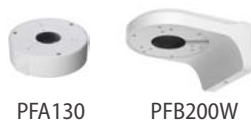
### Features

- 1/3" 2Megapixel CMOS
- 25/30fps@1080P, 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- HD and standard definition switch.
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR,
- 3.6mm fixed lens (2.8mm, 6mm, 8mm optional)
- Max. IR LEDs length 20m, Smart IR
- IP66, DC12V

### Dimensions(mm)



### Accessories (optional)



### Technical Specifications

Model	DH-HAC-HDW2200CP	DH-HAC-HDW2200CN
<b>Camera</b>		
Image Sensor	1/3" 2Megapixel CMOS	
Effective Pixels	1920(H)×1080(V)	
Electronic Shutter	1/3s~1/100,000s	
Video Frame Rate	1920×1080@25fps; 1920×1080@30fps; 1280×720@25fps; 1280×720@30 fps; 1280×720@50fps; 1280×720@60fps	
Synchronization	Internal	
Min. Illumination	0.05Lux@F1.2(AGC ON), 0Lux IR on	
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)	
<b>Camera Features</b>		
Max. IR LEDs Length	20m, Smart IR	
Day/Night	Auto(ICR) / Color / B/W	
Noise Reduction	3D/2D	
OSD Menu	Support	
<b>Lens</b>		
Focal Length	3.6mm (2.8mm, 6mm, 8mm optional)	
Mount Type	M12	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 6W	
Working Environment	-30°C~+60°C / Less than 95%RH (no condensation)	
Transmission Distance	Over 300m via 75-3 coaxial cable	
Ingress Protection	IP66	
Dimensions	Φ107.9mm×94.3mm	
Weight	0.35kg	

# DH-HAC-HDW2200S

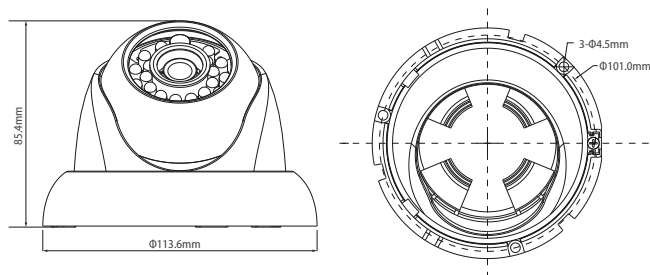
## 2Megapixel 1080P Water-proof IR HDCVI Mini Dome Camera



### Features

- 1/3" 2Megapixel CMOS
- 25/30fps@1080P, 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- HD and standard definition switch
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR,
- 3.6mm fixed lens (2.8 mm, 6mm, 8mm optional)
- Max. IR LEDs length 20m, Smart IR
- IP66, DC12V

### Dimensions(mm)



### Accessories (optional)



### Technical Specifications

Model	DH-HAC-HDW2100SP	DH-HAC-HDW2100SN
<b>Camera</b>		
Image Sensor	1/3" 2Mega CMOS	
Effective Pixels	1920(H)×1080(V)	
Electronic Shutter	1/3s~1/100,000s	
Video Frame Rate	1920×1080@25fps; 1920×1080@30fps; 1280×720@25fps; 1280×720@30 fps; 1280×720@50fps; 1280×720@60fps	
Synchronization	Internal	
Min. Illumination	0.05Lux@F1.2(0Lux IR LED on)	
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)	
<b>Camera Features</b>		
Max. IR LEDs Length	20m, Smart IR	
Day/Night	Auto(ICR)/B&W/Color	
Noise Reduction	3D/2D	
OSD Menu	Support	
<b>Lens</b>		
Focal Length	3.6mm (2.8mm, 6mm, 8mm optional)	
Mount Type	M12	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 3.5W	
Working Environment	-30°C~+60°C/ Less than 95%RH (no condensation)	
Transmission Distance	Over 300m via 75-3 coaxial cable	
Ingress Protection	IP66	
Dimensions	Φ113.6mm×85.8mm	
Weight	0.3kg	

# DH-HAC-HFW3103E

## 1.3Megapixel 720P Water-proof HDCVI IR-Bullet Camera

### Technical Specifications



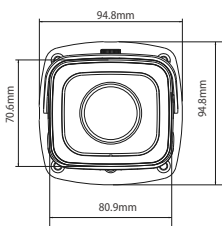
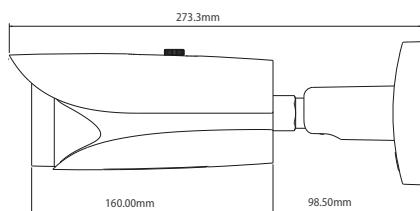
Model	DH-HAC-HFW3103EP	DH-HAC-HFW3103EN
<b>Camera</b>		
Image Sensor	1/3" 1.3Megapixel CMOS	
Effective Pixels	1280(H)×960(V)	
Electronic Shutter	4/25s~1/45,000s	4/30s~1/54,000s
Video Frame Rate	1280×720@25 fps; 1280×720@30 fps; 1280×720@50 fps; 1280×720@60 fps	
Synchronization	Internal	
Min. Illumination	0.01Lux@F1.2(AGC ON), 0Lux IR on	
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)	
<b>Camera Features</b>		
Max. IR LEDs Length	50m, Smart IR	
Day/Night	Auto(ICR) / Color / B/W	
Noise Reduction	2D/3D	
OSD Menu	Support	
<b>Lens</b>		
Focal length	2.8~8mm sync focus lens, motorized zoom	
Mount Type	Φ14	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 5W	
Working Environment	-30°C~+60°C / Less than 95%RH (no condensation)	
Transmission Distance	Over 500m via 75-3 coaxial cable	
Ingress Protection	IP66	
Dimensions(W×D×H)	273.3mm×94.8mm×94.8mm	
Weight	0.5kg	



### Features

- 1/3" 1.3Megapixel CMOS
- 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- HD and standard definition switch
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR
- 2.8~8mm sync focus lens, motorized zoom
- Max. IR LEDs length 50m, Smart IR
- IP66, DC12V

### Dimensions (mm)



# DH-HAC-HDB3103E

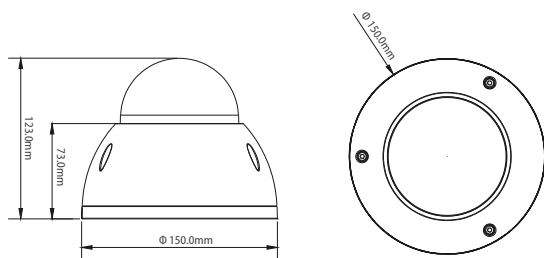
## 1.3Megapixel 720P Vandal-proof HDCVI Dome Camera



### Features

- 1/3" 1.3Megapixel CMOS
- 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- HD and standard definition switch
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR
- 2.8~8mm sync focus lens, motorized zoom
- IP66, IK10, DC12V

### Dimensions (mm)



### Technical Specifications

Model	DH-HAC-HDB3103EP	DH-HAC-HDB3103EN
<b>Camera</b>		
Image Sensor	1/3" 1.3Megapixel CMOS	
Effective Pixels	1280(H)×960(V)	
Electronic Shutter	4/25s~1/45,000s	4/30s~1/54,000s
Video Frame Rate	1280×720@25 fps; 1280×720@30 fps; 1280×720@50 fps; 1280×720@60 fps	
Synchronization	Internal	
Mini. Illumination	Color: 0.01Lux@F1.2(AGC ON), B/W: 0.001Lux@F1.2(AGC ON)	
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)	
<b>Camera Features</b>		
Max. IR LEDs Length	N/A	
Day/Night	Auto(ICR) / Color / B/W	
Noise Reduction	2D/3D	
OSD Menu	Support	
<b>Lens</b>		
Focal length	2.8~8mm sync focus lens, motorized zoom	
Mount Type	Φ14	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 8.8W	
Working Environment	-30°C~+60°C / Less than 95%RH (no condensation)	
Transmission Distance	Over 500m via 75-3 coaxial cable	
Ingress Protection	IP66 & IK10	
Dimensions(W×D×H)	150mm×123mm	
Weight	0.98kg	



# DH-HAC-HDBW3103E

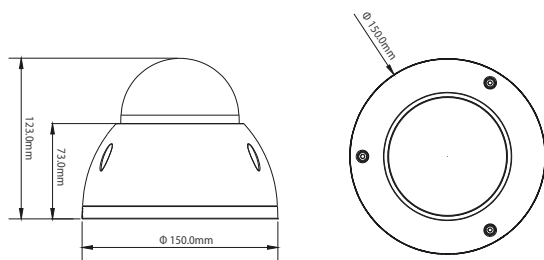
## 1.3Megapixel 720P Vandal-proof HDCVI IR Dome Camera



### Features

- 1/3" 1.3Megapixel CMOS
- 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- HD and standard definition switch
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR
- 2.8~8mm sync focus lens, motorized zoom
- Max. IR LEDs length 20m, Smart IR
- IP66, IK10, DC12V

### Dimensions (mm)



### Technical Specifications

Model	DH-HAC-HDBW3103EP	DH-HAC-HDBW3103EN
<b>Camera</b>		
Image Sensor	1/3" 1.3Megapixel CMOS	
Effective Pixels	1280(H)×960(V)	
Electronic Shutter	4/25s~1/45,000s	4/30s~1/54,000s
Video Frame Rate	1280×720@25 fps; 1280×720@30 fps; 1280×720@50 fps; 1280×720@60 fps	
Synchronization	Internal	
Mini. Illumination	0.01Lux@ (F1.2, AGC ON), 0 Lux IR on	
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)	
<b>Camera Features</b>		
Max. IR LEDs Length	20m, Smart IR	
Day/Night	Auto(ICR) / Color / B/W	
Noise Reduction	2D/3D	
OSD Menu	Support	
<b>Lens</b>		
Focal length	2.8~8mm sync focus lens, motorized zoom	
Mount Type	Φ14	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 8.8W	
Working Environment	-30°C~+60°C / Less than 95%RH (no condensation)	
Transmission Distance	Over 500m via 75-3 coaxial cable	
Ingress Protection	IP66 & IK10	
Dimensions(W×D×H)	150mm×123mm	
Weight	1.0kg	

# DH-HAC-HDW3103C

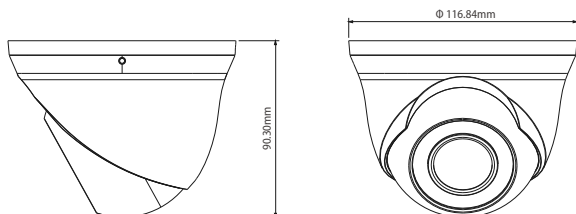
## 1.3Megapixel 720P Water-proof IR HDCVI Mini Dome Camera



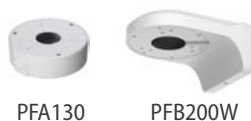
### Features

- 1/3" 1.3Megapixel CMOS
- 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- HD and standard definition switch
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR
- 2.8~8mm sync focus lens, motorized zoom
- Max. IR LEDs length 30m, Smart IR
- IP66, DC12V

### Dimensions (mm)



### Accessories (optional)



### Technical Specifications

Model	DH-HAC-HDW3103CP	DH-HAC-HDW3103CN
<b>Camera</b>		
Image Sensor	1/3" 1.3Megapixel CMOS	
Effective Pixels	1280(H)×960(V)	
Electronic Shutter	4/25s~1/45,000s	4/30s~1/54,000s
Video Frame Rate	1280×720@25 fps; 1280×720@30 fps; 1280×720@50 fps; 1280×720@60 fps	
Synchronization	Internal	
Mini. Illumination	Color: 0.01Lux@F1.2(AGC ON), 0Lux@F1.2 (IR on)	
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)	
<b>Camera Features</b>		
Max. IR LEDs Length	30m, Smart IR	
Day/Night	Auto(ICR) / Color / B/W	
Noise Reduction	2D/3D	
OSD Menu	Support	
<b>Lens</b>		
Focal length	2.8~8mm sync focus lens, motorized zoom	
Mount Type	Φ14	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 8.8W	
Working Environment	-30°C~+60°C / Less than 95%RH (no condensation)	
Transmission Distance	Over 500m via 75-3 coaxial cable	
Ingress Protection	IP66	
Dimensions(W×D×H)	116.84mm×90.3mm	
Weight	0.7kg	

# DH-HAC-HFW2100E

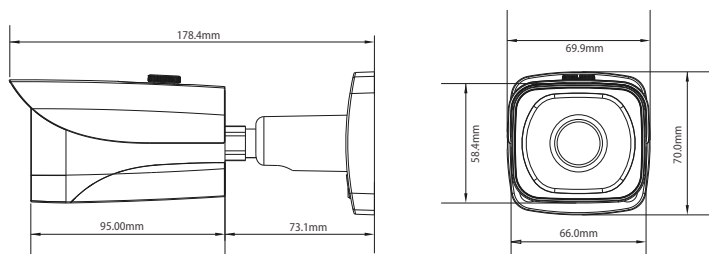
## 1.3Megapixel 720P Water-proof HDCVI IR-Bullet Camera



### Features

- 1/3" 1.3Megapixel CMOS
- 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- HD and standard definition switch
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR
- 6mm fixed lens (2.8 mm, 3.6mm, 8mm optional)
- Max. IR LEDs length 20m, Smart IR
- IP66, DC12V

### Dimensions (mm)



### Technical Specifications

Model	DH-HAC-HFW2100EP	DH-HAC-HFW2100EN
<b>Camera</b>		
Image Sensor	1/3" 1.3Megapixel CMOS	
Effective Pixels	1280(H)×960(V)	
Electronic Shutter	4/25s~1/45,000s	4/30s~1/54,000s
Video Frame Rate	1280×720@25 fps; 1280×720@30 fps; 1280×720@50 fps; 1280×720@60 fps	
Synchronization	Internal	
Mini. Illumination	0.01Lux@F1.2(AGC ON), 0Lux IR on	
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)	
<b>Camera Features</b>		
Max. IR LEDs Length	20m, Smart IR	
Day/Night	Auto(ICR) / Color / B/W	
Noise Reduction	2D/3D	
OSD Menu	Support	
<b>Lens</b>		
Focal length	6mm fixed lens (2.8mm, 3.6mm, 8mm optional)	
Mount Type	M12	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 4.2W	
Working Environment	-30°C~+60°C / Less than 95%RH (no condensation)	
Transmission Distance	Over 500m via 75-3 coaxial cable	
Ingress Protection	IP66	
Dimensions(W×D×H)	178.4mm×69.9mm×70.0mm	
Weight	0.5kg	

# DH-HAC-HFW2100S

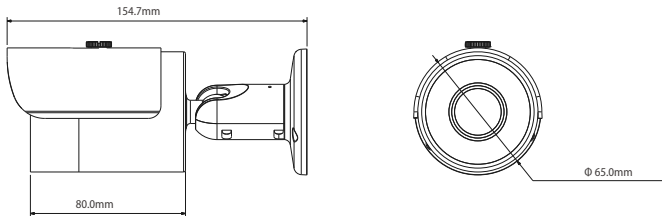
## 1.3Megapixel 720P Water-proof IR HDCVI Camera



### Features

- 1/3" 1.3Megapixel CMOS
- 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- HD and standard definition switch.
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR,
- 6mm fixed lens (2.8 mm, 3.6mm, 8mm optional)
- Max. IR LEDs length 20m, Smart IR
- IP66, DC12V

### Dimensions(mm)



### Accessories (optional)



PFA130

### Technical Specifications

Model	DH-CA-HFW2100SP	DH-CA-HFW2100SN
<b>Camera</b>		
Image Sensor	1/3" 1.3Megapixel CMOS	
Effective Pixels	1280(H)×960(V)	
Electronic Shutter	4/25s~1/45,000s	4/30~1/54,000s
Video Frame Rate	1280×720@25fps; 1280×720@30fps; 1280×720@50fps; 1280×720@60fps	
Synchronization	Internal	
Min. Illumination	0.01Lux@F1.2(0Lux IR LED on)	
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)	
<b>Camera Features</b>		
Max. IR LEDs Length	20m, Smart IR	
Day/Night	Auto(ICR)/B&W/Color	
Noise Reduction	2D/3D	
OSD Menu	Support	
<b>Lens</b>		
Focal length	6mm (2.8 mm, 3.6mm, 8mm optional)	
Mount Type	M12	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 4.2W	
Working Environment	-30°C~+60°C/ Less than 95%RH (no condensation)	
Transmission Distance	Over 500m via 75-3 coaxial cable	
Ingress Protection	IP66	
Dimensions(W×D×H)	Φ65mm×154.7mm	
Weight	0.38kg	
Others	Default: bracket included	

# DH-HAC-HFW2100D

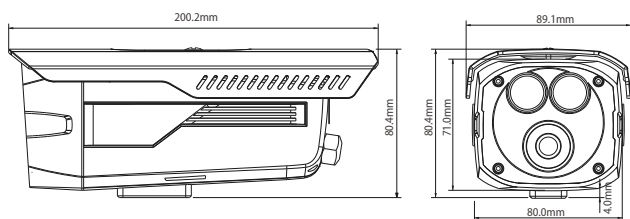
## 1.3Megapixel 720P Water-proof IR HDCVI Camera



### Features

- 1/3" 1.3Megapixel CMOS
- 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- HD and standard definition switch.
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR,
- 8mm fixed lens (3.6 mm, 6mm, 12mm, 16mm optional)
- Max. IR LEDs length 50m, Smart IR
- IP66, DC12V

### Dimensions(mm)



### Accessories (optional)



### Technical Specifications

Model	DH-HAC-HFW2100DP	DH-HAC-HFW2100DN
<b>Camera</b>		
Image Sensor	1/3" 1.3Megapixel CMOS	
Effective Pixels	1280(H)×960(V)	
Electronic Shutter	4/25s~1/45,000s	4/30~1/54,000s
Video Frame Rate	1280×720@25fps; 1280×720@30fps; 1280×720@50fps; 1280×720@60fps	
Synchronization	Internal	
Min. Illumination	0.01Lux@F1.2(0Lux IR LED on)	
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)	
<b>Camera Features</b>		
Max. IR LEDs Length	50m, Smart IR	
Day/Night	Auto(ICR) / Color / B/W	
Noise Reduction	2D/3D	
OSD Menu	Support	
<b>Lens</b>		
Focal length	8mm fixed lens (3.6mm, 6mm, 12mm, 16mm optional)	
Mount Type	M12	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 7.7W	
Working Environment	-30°C~+60°C/ Less than 95%RH (no condensation)	
Transmission Distance	Over 500m via 75-3 coaxial cable	
Ingress Protection	IP66	
Dimensions(W×D×H)	Φ200.2mm×89.1mm×80.4mm	
Weight	0.45kg	

# DH-HAC-HFW2100B(-B)

## 1.3Megapixel 720P Water-proof IR HDCVI Camera

### Technical Specifications

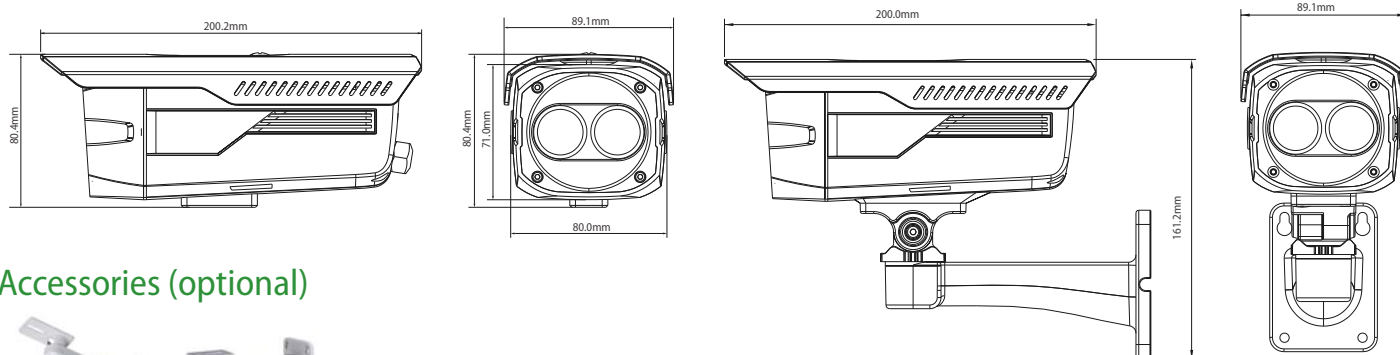
Model	DH-HAC-HFW2100BP	DH-HAC-HFW2100BN	DH-HAC-HFW2100BP-B	DH-HAC-HFW2100BN-B
<b>Camera</b>				
Image Sensor	1/3" 1.3Megapixel CMOS			
Effective Pixels	1280(H)×960(V)			
Electronic Shutter	PAL: 4/25s~1/45,000s; NTSC: 4/30~1/54,000s			
Video Frame Rate	1280×720@25fps; 1280×720@30fps; 1280×720@50fps; 1280×720@60fps			
Synchronization	Internal			
Min. Illumination	0.01Lux@F1.2(0Lux IR LED on)			
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)			
<b>Camera Features</b>				
Max. IR LEDs Length	30m, Smart IR			
Day/Night	Auto(ICR)/B&W/Color			
Noise Reduction	3D/2D			
OSD Menu	Support			
<b>Lens</b>				
Focal length	6mm (2.8 mm, 3.6mm, 8mm optional)			
Mount Type	M12			
<b>General</b>				
Power Supply	DC12V±10%			
Power Consumption	Max 6W			
Working Environment	-30°C~+60°C Humidity is less than 95%(no condensation)			
Transmission Distance	Over 500m via 75-3 coaxial cable			
Ingress Protection	IP66			
Dimensions(W×D×H)	200.2mm×89.1mm×80.4mm		200mm×89.1mm×161.2mm	
Weight	0.45kg		0.58kg	
Others	N/A		Default: bracket included	



### Features

- 1/3" 1.3Megapixel CMOS
- 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- HD and standard definition switch
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR
- 6mm fixed lens (2.8 mm, 3.6mm, 8mm optional)
- Max. IR LEDs length 30m, Smart IR
- IP66, DC12V
- Default with bracket (HFW2100B-B)

### Dimensions(mm)



### Accessories (optional)



PFB120W

PFB121W

# DH-HAC-HDW2100C

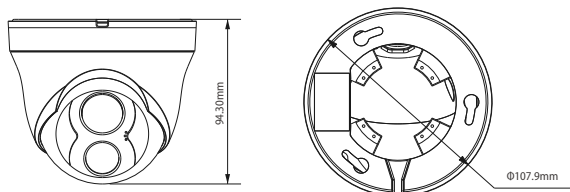
## 1.3Megapixel 720P Water-proof IR HDCVI Mini Dome Camera



### Features

- 1/3" 1.3Megapixel CMOS
- 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- HD and standard definition switch
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR
- 3.6mm fixed lens (2.8mm, 6mm, 8mm optional)
- Max. IR LEDs length 20m, Smart IR
- IP66, DC12V

### Dimensions(mm)



### Accessories (optional)



### Technical Specifications

Model	DH-HAC-HDW2100CP	DH-HAC-HDW2100CN
<b>Camera</b>		
Image Sensor	1/3" 1.3Megapixel CMOS	
Effective Pixels	1280(H) x720(V)	
Electronic Shutter	4/25s~1/45,000s	4/30s~1/54,000s
Video Frame Rate	1280×720@25fps; 1280×720@30 fps; 1280×720@50fps; 1280×720@60fps	
Synchronization	Internal	
Min. Illumination	0.01Lux@F1.2(AGC ON),0Lux IR on	
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)	
<b>Camera Features</b>		
Max. IR LEDs Length	20m, Smart IR	
Day/Night	Auto(ICR) / Color / B/W	
Noise Reduction	3D/2D	
OSD Menu	Support	
<b>Lens</b>		
Focal Length	3.6mm (2.8mm, 6mm, 8mm optional)	
Mount Type	M12	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 6W	
Working Environment	-30°C~+60°C / Less than 95%RH (no condensation)	
Transmission Distance	Over 500m via 75-3 coaxial cable	
Ingress Protection	IP66	
Dimensions	Φ107.9mm×94.3mm	
Weight	0.35kg	

# DH-HAC-HDW2100S

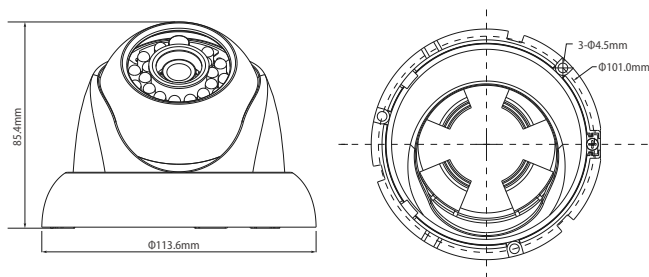
## 1.3Megapixel 720P Water-proof IR HDCVI Mini Dome Camera



### Features

- 1/3" 1.3Megapixel CMOS
- 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- HD and standard definition switch
- OSD Menu, control over coaxial cable
- Day/Night(ICR), AWB, AGC, BLC, 3D-DNR
- 6mm fixed lens (2.8 mm, 3.6mm, 8mm optional)
- Max. IR LEDs length 20m, Smart IR
- IP66, DC12V

### Dimensions(mm)



### Accessories (optional)



### Technical Specifications

Model	DH-HAC-HDW2100SP	DH-HAC-HDW2100SN
<b>Camera</b>		
Image Sensor	1/3" 1.3Mega CMOS	
Effective Pixels	1280(H)×960(V)	
Electronic Shutter	4/25s~1/45,000s	4/30~1/54,000s
Video Frame Rate	1280×720@25fps; 1280×720@30 fps; 1280×720@50fps; 1280×720@60fps	
Synchronization	Internal	
Min. Illumination	0.01Lux@F1.2(0Lux IR LED on)	
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)	
<b>Camera Features</b>		
Max. IR LEDs Length	20m, Smart IR	
Day/Night	Auto(ICR)/B&W/Color	
Noise Reduction	3D/2D	
OSD Menu	Support	
<b>Lens</b>		
Focal Length	3.6mm (2.8mm, 6mm 8mm optional)	
Mount Type	M12	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 3.5W	
Working Environment	-30°C~+60°C/ Less than 95%RH (no condensation)	
Transmission Distance	Over 500m via 75-3 coaxial cable	
Ingress Protection	IP66	
Dimensions	Φ113.6mm×85.4mm	
Weight	0.3kg	



# DH-HAC-HFW1100S

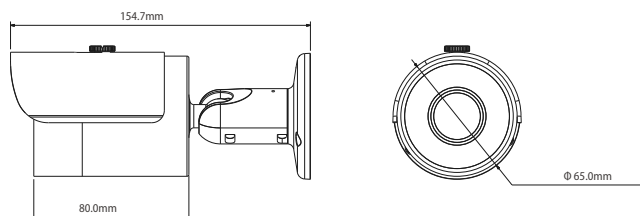
## 1Megapixel 720P Cost-effective Water-proof Mini IR HDCVI Camera



### Features

- 1/2.9" 1Megapixel CMOS
- 25/30fps@720P
- High speed, long distance real-time transmission
- Day/Night(ICR), AWB, AGC, BLC
- 6mm fixed lens (2.8 mm, 3.6mm, 8mm optional)
- Max. IR LEDs length 20m, Smart IR
- IP66, DC12V

### Dimensions (mm)



### Accessories (optional)



PFA130

### Technical Specifications

Model	DH-CA-HFW2100SP	DH-CA-HFW2100SN
<b>Camera</b>		
Image Sensor	1/2.9" 1Megapixel CMOS	
Effective Pixels	1280(H)×720(V)	
Electronic Shutter	1/50s~1/100,000s	1/60~1/100,000s
Video Frame Rate	1280×720@25fps; 1280×720@30fps	
Synchronization	Internal	
Min. Illumination	0.01Lux@F1.2(0Lux IR LED on)	
Video Output	1-channel BNC HDCVI high definition video output	
<b>Camera Features</b>		
Max. IR LEDs Length	20m, Smart IR	
Day/Night	Auto(ICR)/B&W/Color	
Noise Reduction	2D	
<b>Lens</b>		
Focal length	6mm (2.8 mm, 3.6mm, 8mm optional)	
Mount Type	M12	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	<3.5W	
Working Environment	-30°C~+60°C/ Less than 95%RH (no condensation)	
Transmission Distance	Over 500m via 75-3 coaxial cable	
Ingress Protection	IP66	
Dimensions(W×D×H)	Φ65mm×154.7mm	
Weight	0.38kg	
Others	Default: bracket included	

# DH-HAC-HDW1100

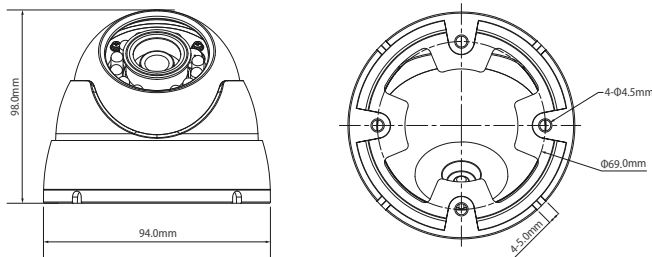
## 1Megapixel 720P Cost-effective Water-proof IR HDCVI Mini Dome Camera



### Features

- 1/2.9" 1Megapixel CMOS
- 25/30fps@720P
- High speed, long distance real-time transmission
- Day/Night(ICR), AWB, AGC, BLC
- 3.6mm fixed lens (2.8mm, 6mm, 8mm optional)
- Max. IR LEDs length 20m, Smart IR
- IP66, DC12V

### Dimensions(mm)



### Accessories (optional)



### Technical Specifications

Model	DH-HAC-HDW1100P	DH-HAC-HDW1100N
<b>Camera</b>		
Image Sensor	1/2.9" 1Megapixel CMOS	
Effective Pixels	1280(H) x720(V)	
Electronic Shutter	1/50s~1/100,000s	1/60s~1/100,000s
Video Frame Rate	1280×720@25fps; 1280×720@30fps	
Synchronization	Internal	
Min. Illumination	0.01Lux@F1.2(AGC ON),0Lux IR on	
Video Output	1-channel BNC HDCVI high definition video output	
<b>Camera Features</b>		
Max. IR LEDs Length	20m, Smart IR	
Day/Night	Auto(ICR) / Color / B/W	
Noise Reduction	2D	
<b>Lens</b>		
Focal Length	3.6mm (2.8mm, 6mm, 8mm optional)	
Mount Type	M12	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 2.5W	
Working Environment	-30°C~+60°C / Less than 95%RH (no condensation)	
Transmission Distance	Over 500m via 75-3 coaxial cable	
Ingress Protection	IP66	
Dimensions	Φ94.0mm×98mm	
Weight	0.33kg	

# DH-HAC-HDW1100D

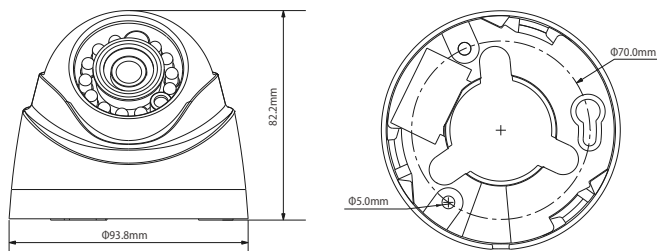
## 1Megapixel 720P Cost-effective IR HDCVI Mini Dome Camera



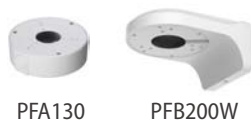
### Features

- 1/2.9" 1Megapixel CMOS
- 25/30fps@720P
- High speed, long distance real-time transmission
- Day/Night(ICR), AWB, AGC, BLC
- 3.6mm fixed lens (2.8mm, 6mm, 8mm optional)
- Max. IR LEDs length 20m, Smart IR
- DC12V

### Dimensions (mm)



### Accessories (optional)



### Technical Specifications

Model	DH-HAC-HDW1100DP	DH-HAC-HDW1100DN
<b>Camera</b>		
Image Sensor	1/2.9" 1Megapixel CMOS	
Effective Pixels	1280(H) x720(V)	
Electronic Shutter	1/50s~1/100,000s	1/60s~1/100,000s
Video Frame Rate	1280×720@25 fps; 1280×720@30 fps	
Synchronization	Internal	
Min. Illumination	0.01Lux@F1.2(AGC ON), 0Lux IR on	
Video Output	1-channel BNC HDCVI high definition video output	
<b>Camera Features</b>		
Max. IR LEDs Length	20m, Smart IR	
Day/Night	Auto(ICR) / Color / B/W	
Noise Reduction	2D	
<b>Lens</b>		
Focal length	3.6mm (2.8mm, 6mm, 8mm optional)	
Mount Type	M12	
<b>General</b>		
Power Supply	DC12V±10%	
Power Consumption	Max 2.5W	
Working Environment	-30°C~+60°C / Less than 95%RH (no condensation)	
Transmission Distance	Over 500m via 75-3 coaxial cable	
Dimensions	Φ93.80mm×82.2mm	
Weight	0.18kg	



# HDCVI PTZ Camera

# DH-SD63220I-HC

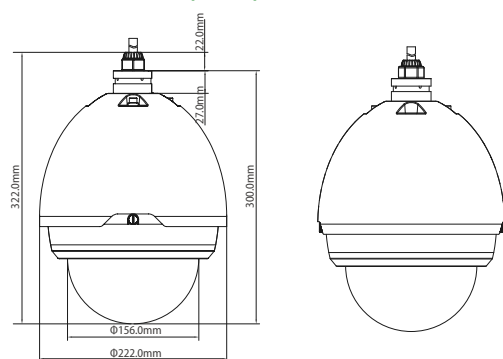
## 2Mp Full HD HDCVI PTZ Dome Camera



### Features

- 20x optical zoom
- Max. 25/30fps@1080P (1920×1080) & 50/60fps@720P resolution
- DWDR, Day/Night(ICR), Ultra DNR, Auto iris, Auto focus
- Control over coaxial cable, long distance real-time transmission
- Max 400°/s pan speed, 360° endless pan rotation
- Up to 255 presets, 5 auto scan, 8 tour, 5 pattern
- Built-in 2/1 alarm in/out
- Support intelligent 3D positioning with DH-SD protocol
- IP66

### Dimensions (mm)



### Technical Specifications

Model	DH-SD63220I-HC
<b>Camera</b>	
Image Sensor	1/3" Exmor CMOS
Effective Pixels	1920(H)×1080(V), 2 Megapixels
Scanning System	Progressive
Electronic Shutter Speed	1/1~1/30,000s
Min. Illumination	Color: 0.05Lux@F1.4; B/W: 0.005Lux@F1.4
S/N Ratio	More than 50dB
Resolution	1080P (25/30fps), 720P (25/30/50/60fps)
Video Output	1-channel BNC HDCVI high definition video output
<b>Camera Features</b>	
Day/Night	Auto(ICR) / Color / B/W
Backlight Compensation	BLC / HLC / DWDR (Digital WDR)
White Balance	Auto, ATW, Indoor, Outdoor, Manual
Gain Control	Auto / Manual
Noise Reduction	2D / 3D
Privacy Masking	Up to 24 areas
Digital Zoom	16x
<b>Lens</b>	
Focal Length	4.7mm~94mm (20x Optical zoom)
Max Aperture	F1.4~F2.6
Focus Control	Auto / Manual
Angle of View	H: 54.1°~3.2°
Close Focus Distance	100mm~1000mm
<b>PTZ</b>	
Pan/Tilt Range	Pan: 0°~360° endless; Tilt: -2°~90°, auto flip 180°
Manual Control Speed	Pan: 0.1°~300° /s; Tilt: 0.1°~250° /s
Preset Speed	Pan: 400° /s; Tilt: 300° /s
Preset	80 (DH-SD), 255 (Pelco-P/D)
PTZ Mode	5 Pattern, 8 Tour, Auto Pan, Auto Scan
Speed Setup	Human-oriented focal length / speed adaptation
Power up Action	Auto restore to previous PTZ and lens status after power failure
Idle Motion	Activate Preset / Pan / Scan / Tour / Pattern if there is no command in the specified period
Time Task	Auto activation of Preset / Pan / Scan / Tour / Pattern by preset-time
Protocol	DH-SD, Pelco-P/D (Auto recognition)
<b>Audio</b>	
Interface	1 channel In
<b>Auxiliary Interface</b>	
RS485	1
Alarm	2/1 channel In/Out
<b>General</b>	
Power Supply	AC 24V / 2.2A (±10%)
Power Consumption	9.5W, 21W (Heater on)
Working Environment	-40°C ~ 60°C / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	IK10
Dimensions	Φ222mm×322mm
Weight	7.5kg

### Accessories



DH-63FB Power Supply

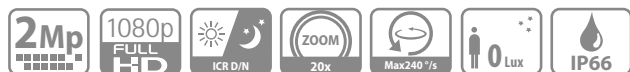
### Accessories(optional)



DH-PFA111 DH-PFB300C DH-PFB301C DH-PFA112 DH-PFA113 DH-PFB301S DH-PFA120 DH-PFA150 DH-PFA151

# DH-SD6C220I-HC

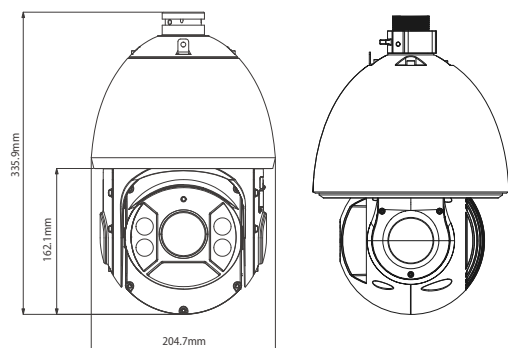
## 2Mp Full HD HDCVI IR PTZ Dome Camera



### Features

- 20x optical zoom
- Max. 25/30fps@1080P(1920×1080) & 50/60fps@720P resolution
- DWDR, Day/Night(ICR), Ultra DNR, Auto iris, Auto focus
- Control over coaxial cable, long distance real-time transmission
- Max 240°/s pan speed, 360° endless pan rotation
- Up to 255 presets, 5 auto scan, 8 tour, 5 pattern
- Built-in 2/1 alarm in/out
- Support intelligent 3D positioning with DH-SD protocol
- IR Distance up to 100m
- IP66

### Dimensions (mm)



### Accessories



DH-64FB Power Supply

### Accessories(optional)



DH-PFA114 DH-PFB300C DH-PFB301C DH-PFA112 DH-PFA113 DH-PFB301S DH-PFA120 DH-PFA150 DH-PFA151

### Technical Specifications

Model	DH-SD6C220I-HC
<b>Camera</b>	
Image Sensor	1/3" Exmor CMOS
Effective Pixels	1920(H)×1080(V), 2Megapixels
Scanning System	Progressive
Electronic Shutter Speed	1/1 ~ 1/30,000s
Min. Illumination	Color: 0.05Lux@F1.4; B/W: 0.005Lux@F1.4; 0Lux (IR on)
S/N Ratio	More than 50dB
Resolution	1080P (25/30fps), 720P (25/30/50/60fps)
Video Output	1-channel BNC HDCVI high definition video output
<b>Camera Features</b>	
Day/Night	Auto(ICR) / Color / B/W
Backlight Compensation	BLC / HLC / DWDR (Digital WDR)
White Balance	Auto, ATW, Indoor, Outdoor, Manual
Gain Control	Auto / Manual
Noise Reduction	2D / 3D
Privacy Masking	Up to 24 areas
Digital Zoom	16x
<b>Lens</b>	
Focal Length	4.7mm~94mm (20x Optical zoom)
Max Aperture	F1.4~F2.6
Focus Control	Auto / Manual
Angle of View	H: 54.1°~3.2°
Close Focus Distance	100mm~1000mm
<b>PTZ</b>	
Pan/Tilt Range	Pan: 0°~360° endless; Tilt: -15°~90°, auto flip 180°
Manual Control Speed	Pan: 0.1°~160° /s; Tilt: 0.1°~120° /s
Preset Speed	Pan: 240° /s; Tilt: 200° /s
Preset	80 (DH-SD), 255 (Pelco-P/D)
PTZ Mode	5 Pattern, 8 Tour, Auto Pan, Auto Scan
Speed Setup	Human-oriented focal length/ speed adaptation
Power up Action	Auto restore to previous PTZ and lens status after power failure
Idle Motion	Activate Preset / Pan / Scan / Tour / Pattern if there is no command in the specified period
Time Task	Auto activation of Preset / Pan / Scan / Tour / Pattern by preset-time
Protocol	DH-SD, Pelco-P / D (Auto recognition)
IR Distance	100m (2 near IR LED+ 4 far IR LED)
<b>Audio</b>	
Interface	1 channel In
<b>Auxiliary Interface</b>	
RS485	1
Alarm	2/1 channel In/Out
<b>General</b>	
Power Supply	AC 24V/2.2A (±10%)
Power Consumption	10.5W, 26W (IR on, Heater on)
Working Environment	-40°C ~ 60°C / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	N/A
Dimensions	Φ204.7mm×335.9mm
Weight	7.5kg

# DH-SD40/42/42C212I-HC

## 2Mp Mini HDCVI PTZ Dome Camera



SD40212I-HC

SD42212I-HC

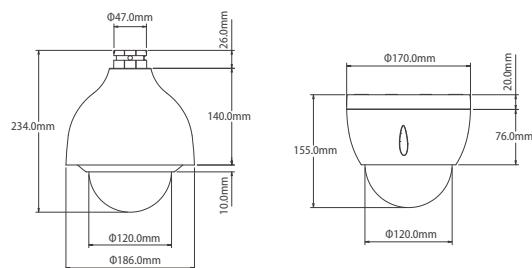
SD42C212I-HC



### Features

- Powerful 12x optical zoom
- Max. 25/30fps@1080P
- DWDR, Day/Night (ICR), DNR (2D&3D), Auto iris, Auto focus, AWB, AGC, BLC
- Max 300°/s pan speed, 360° continuous pan rotation
- Control over coaxial cable, long distance real-time transmission
- Up to 255 presets, 5 auto scan, 8 tour, 5 pattern
- Built-in 2/1 alarm in/out
- Support intelligent 3D positioning with DH-SD protocol
- IP66, OSD

### Dimensions (mm)



### Accessories-SD40212I-HC



### Accessories(Optional)-SD40212I-HC



### Technical Specifications

Model	DH-SD40212I-HC	DH-SD42212I-HC	DH-SD42C212I-HC
<b>Camera</b>			
Image Sensor	1/3" Exmor CMOS		
Effective Pixels	1944(H)×1092(V), 2 Megapixels		
Horizontal Resolution	≥1000TVL		
Scanning System	Progressive		
Electronic Shutter Speed	1/3s ~1/30,000s		
Min. Illumination	Color: 0.05 Lux/F1.6, B/W: 0.005Lux/F1.6		
S/N Ratio	More than 55dB		
Resolution	1080P(25/30fps), 720P(25/30fps)		
Video Output	1-channel BNC HDCVI high definition video output		
<b>Camera Features</b>			
Day/Night	Auto(ICR) / Color / B/W		
Backlight Compensation	BLC / HLC / DWDR (Digital WDR)		
White Balance	Auto, ATW, Indoor, Outdoor, Manual		
Gain Control	Auto / Manual		
Noise Reduction	2D / 3D		
Privacy Masking	Up to 24 areas		
Digital Zoom	16x		
<b>Lens</b>			
Focal Length	5.1 mm~61.2mm (12x Optical zoom)		
Max Aperture	F1.2~ F2.1		
Focus Control	Auto / Manual		
Angle of View	51.3° ~ 4.64°		
Close Focus Distance	100mm~1000mm		
<b>PTZ</b>			
Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: -2° ~ 90°, auto flip 180°		
Manual Control Speed	Pan: 0.1° ~ 200°/s; Tilt: 0.1° ~ 120°/s		
Preset Speed	Pan: 300°/s; Tilt: 200°/s		
Preset	80(DH-SD) , 255(Pelco-P/D)		
PTZ Mode	5 Pattern, 8 Tour, 5 Auto Scan, Auto Pan		
Speed Setup	Human-oriented focal length/ speed adaptation		
Power up Action	Auto restore to previous PTZ and lens status after power failure		
Idle Motion	Activate Preset/Pan/Scan/Tour/Pattern if there is no command in the specified period		
Time Task	Auto activation of Preset/Pan/Scan/Tour/Pattern by preset-time		
Protocol	DH-SD, Pelco-P/D (Auto recognition)		
<b>Audio</b>			
Interface	1 channel In		
<b>Auxiliary Interface</b>			
RS485	1		
Alarm	2/1 channel In/Out		
<b>General</b>			
Power Supply	AC24V/1.5A (±10%)		
Power Consumption	12W, 22W(Heater on)	12W	
Working Environment	-40°C ~ 60°C / Less than 90% RH	-10°C ~ 60°C / Less than 90% RH	
Ingress Protection	IP66		N/A
Dimensions	Φ186mm×234mm	Φ170mm×155mm	Φ198mm×158mm
Weight	2.3Kg	1.8Kg	2.3Kg

### Accessories(Optional)-SD42212I-HC



# DH-SD63120I-HC

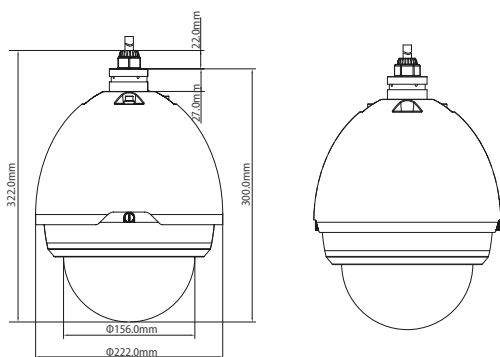
## 1.3Mp HD HDCVI PTZ Dome Camera



### Features

- 20x optical zoom
- Max 50/60fps@720P resolution
- DWDR, Day/Night(ICR), Ultra DNR, Auto iris, Auto focus
- Control over coaxial cable, long distance real-time transmission
- Max 400°/s pan speed, 360° endless pan rotation
- Up to 255 presets, 5 auto scan, 8 tour, 5 pattern
- Built-in 2/1 alarm in/out
- Support intelligent 3D positioning with DH-SD protocol
- IP66

### Dimensions (mm)



### Technical Specifications

Model	DH-SD63120I-HC
<b>Camera</b>	
Image Sensor	1/3" Exmor CMOS
Effective Pixels	1280(H)×960(V), 1.3 Megapixels
Scanning System	Progressive
Electronic Shutter Speed	1/1 ~ 1/30,000s
Min. Illumination	Color: 0.05Lux@F1.4; B/W: 0.005Lux@F1.4
S/N Ratio	More than 50dB
Resolution	720P(25/30/50/60fps)
Video Output	1-channel BNC HDCVI high definition video output
<b>Camera Features</b>	
Day/Night	Auto(ICR) / Color / B/W
Backlight Compensation	BLC / HLC / DWDR (Digital WDR)
White Balance	Auto, ATW, Indoor, Outdoor, Manual
Gain Control	Auto / Manual
Noise Reduction	2D/3D
Privacy Masking	Up to 24 areas
Digital Zoom	16x
<b>Lens</b>	
Focal Length	4.7mm~94mm(20x Optical zoom)
Max Aperture	F1.4 ~ F2.6
Focus Control	Auto / Manual
Angle of View	H: 54.1° ~ 3.2°
Close Focus Distance	100mm~ 1000mm
<b>PTZ</b>	
Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: -2° ~ 90°, auto flip 180°
Manual Control Speed	Pan: 0.1° ~300° /s; Tilt: 0.1° ~250° /s
Preset Speed	Pan: 400° /s; Tilt: 300° /s
Preset	80(DH-SD), 255(Pelco-P/D)
PTZ Mode	5 Pattern, 8 Tour, Auto Pan, Auto Scan
Speed Setup	Human-oriented focal length/ speed adaptation
Power up Action	Auto restore to previous PTZ and lens status after power failure
Idle Motion	Activate Preset/ Pan/ Scan/ Tour/ Pattern if there is no command in the specified period
Time Task	Auto activation of Preset/ Pan/ Scan/ Tour/ Pattern by preset-time
Protocol	DH-SD, Pelco-P/D (Auto recognition)
<b>Audio</b>	
Interface	1 channel In
<b>Auxiliary Interface</b>	
RS485	1
Alarm	2/1 channel In/Out
<b>General</b>	
Power Supply	AC 24V/2.2A (±10%)
Power Consumption	9.5W, 21W (Heater on)
Working Environment	-40°C ~ 60°C / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	IK10
Dimensions	Φ222mm×322mm
Weight	7.5kg

### Accessories



### Accessories(optional)





# DH-SD6C120I-HC

## 1.3Mp HD HDCVI IR PTZ Dome Camera



### Technical Specifications

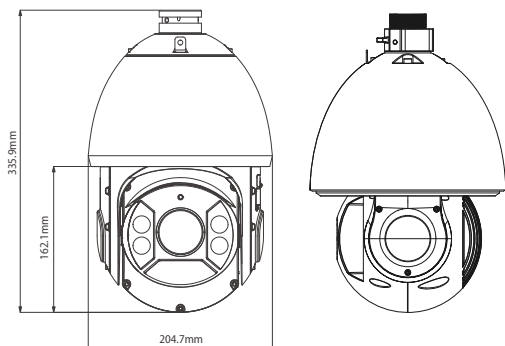
Model	DH-SD6C120I-HC
<b>Camera</b>	
Image Sensor	1/3" Exmor CMOS
Effective Pixels	1280(H)×960(V), 1.3 Megapixels
Scanning System	Progressive
Electronic Shutter Speed	1/1 ~ 1/30,000s
Min. Illumination	Color: 0.05Lux@F1.4; B/W: 0.005Lux@F1.4; 0Lux (IR on)
S/N Ratio	More than 50dB
Resolution	720P (25/30/50/60fps)
Video Output	1-channel BNC HDCVI high definition video output
<b>Camera Features</b>	
Day/Night	Auto(ICR) / Color / B/W
Backlight Compensation	BLC / HLC / DWDR (Digital WDR)
White Balance	Auto, ATW, Indoor, Outdoor, Manual
Gain Control	Auto / Manual
Noise Reduction	2D / 3D
Privacy Masking	Up to 24 areas
Digital Zoom	16x
<b>Lens</b>	
Focal Length	4.7mm~94mm (20x Optical zoom)
Max Aperture	F1.4~F2.6
Focus Control	Auto / Manual
Angle of View	H: 54.1°~3.2°
Close Focus Distance	100mm~1000mm
<b>PTZ</b>	
Pan/Tilt Range	Pan: 0°~360° endless; Tilt: -15°~90°, auto flip 180°
Manual Control Speed	Pan: 0.1°~160° /s; Tilt: 0.1°~120° /s
Preset Speed	Pan: 240° /s; Tilt: 200° /s
Preset	80 (DH-SD), 255 (Pelco-P/D)
PTZ Mode	5 Pattern, 8 Tour, Auto Pan, Auto Scan
Speed Setup	Human-oriented focal length / speed adaptation
Power up Action	Auto restore to previous PTZ and lens status after power failure
Idle Motion	Activate Preset / Pan / Scan / Tour / Pattern if there is no command in the specified period
Time Task	Auto activation of Preset / Pan / Scan / Tour / Pattern by preset-time
Protocol	DH-SD, Pelco-P/D (Auto recognition)
IR Distance	100m (2 near IR LED+ 4 far IR LED)
<b>Audio</b>	
Interface	1 channel In
<b>Auxiliary Interface</b>	
RS485	1
Alarm	2/1 channel In/Out
<b>General</b>	
Power Supply	AC 24V/2.2A (±10%)
Power Consumption	10.5W, 26W (IR on, Heater on)
Working Environment	-40°C ~ 60°C / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	N/A
Dimensions	Φ204.7mm×335.9mm
Weight	7.5kg



### Features

- 20x optical zoom
- Max 50/60fps@720P resolution
- DWDR, Day/Night(ICR), Ultra DNR, Auto iris, Auto focus
- Control over coaxial cable, long distance real-time transmission
- Max 240°/s pan speed, 360° endless pan rotation
- Up to 255 presets, 5 auto scan, 8 tour, 5 pattern
- Built-in 2/1 alarm in/out
- Support intelligent 3D positioning with DH-SD protocol
- IR Distance up to 100m
- IP66

### Dimensions (mm)



### Accessories



DH-64FB Power Supply

### Accessories(optional)



DH-PFA114 DH-PFB300C DH-PFB301C DH-PFA112 DH-PFA113 DH-PFB301S DH-PFA120 DH-PFA150 DH-PFA151

# DH-SD40/42/42C112I-HC

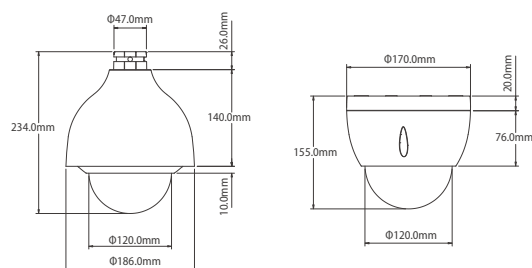
## 1.3Mp Mini HDCVI PTZ Dome Camera



### Features

- Powerful 12x optical zoom
- 25/30/50/60fps@720P
- DWDR, Day/Night (ICR), DNR (2D&3D), Auto iris, Auto focus, AWB, AGC, BLC
- Max 300°/s pan speed, 360° continuous pan rotation
- Control over coaxial cable, long distance real-time transmission
- Up to 255 presets, 5 auto scan, 8 tour, 5 pattern
- Built-in 2/1 alarm in/out
- Support intelligent 3D positioning with DH-SD protocol
- IP66, OSD

### Dimensions (mm)



### Accessories-SD40212I-HC



### Accessories(Optional)-SD40212I-HC



### Technical Specifications

Model	DH-SD40112I-HC	DH-SD42112I-HC	DH-SD42C112I-HC
<b>Camera</b>			
Image Sensor	1/3" Exmor CMOS		
Effective Pixels	1280(H)×960(V), 1.3Megapixels		
Horizontal Resolution	≥700TVL		
Scanning System	Progressive		
Electronic Shutter Speed	1/3s ~1/30,000s		
Min. Illumination	Color: 0.05 Lux / F1.6, B/W: 0.005Lux / F1.6		
S/N Ratio	More than 55dB		
Resolution	720P (25/30/50/60fps)		
Video Output	1-channel BNC HDCVI high definition video output		
<b>Camera Features</b>			
Day/Night	Auto(ICR) / Color / B/W		
Backlight Compensation	BLC / HLC / DWDR (Digital WDR)		
White Balance	Auto, ATW, Indoor, Outdoor, Manual		
Gain Control	Auto / Manual		
Noise Reduction	2D / 3D		
Privacy Masking	Up to 24 areas		
Digital Zoom	16x		
<b>Lens</b>			
Focal Length	5.1 mm~61.2mm (12x Optical zoom)		
Max Aperture	F1.2~ F2.1		
Focus Control	Auto / Manual		
Angle of View	51.3°~4.64°		
Close Focus Distance	100mm~1000mm		
<b>PTZ</b>			
Pan/Tilt Range	Pan: 0°~360° endless; Tilt: -2°~ 90°, auto flip 180°		
Manual Control Speed	Pan: 0.1°~200°/s; Tilt: 0.1°~120°/s		
Preset Speed	Pan: 300°/s; Tilt:200°/s		
Preset	80(DH-SD) , 255(Pelco-P/D)		
PTZ Mode	5 Pattern, 8 Tour, 5 Auto Scan, Auto Pan		
Speed Setup	Human-oriented focal length / speed adaptation		
Power up Action	Auto restore to previous PTZ and lens status after power failure		
Idle Motion	Activate Preset / Pan / Scan / Tour / Pattern if there is no command in the specified period		
Time Task	Auto activation of Preset / Pan / Scan / Tour / Pattern by preset-time		
Protocol	DH-SD, Pelco-P/D (Auto recognition)		
<b>Audio</b>			
Interface	1 channel In		
<b>Auxiliary Interface</b>			
RS485	1		
Alarm	2/1 channel In/Out		
<b>General</b>			
Power Supply	AC24V / 1.5A (±10%)		
Power Consumption	12W, 22W (Heater on)	12W	
Working Environment	-40°C ~ 60°C / Less than 90% RH	-10°C ~ 60°C / Less than 90% RH	
Ingress Protection	IP66	N/A	
Dimensions	Φ186mm×234mm	Φ170mm×155mm	Φ198mm×158mm
Weight	2.3Kg	1.8Kg	2.3Kg

# HDCVI

High Definition Composite Video Interface

## What is HDCVI ?

HDCVI (High Definition Composite Video Interface) is an over-coaxial-cable analog HD video transmission standard which is in-house technology and it renders two HD video formats —1920H (1920×1080) & 1280H (1280×720) by progressive scanning.

### Highlights:

- HD Video format
- Analog Modulation
- Transmission over coaxial cable
- Composite video/audio/PTZ signals
- Two-way data transmission
- Auto Compensation & Long range transmission(Transmitted via 75-3; 1280H: min.500m/1920H: min.300m)

HDCVI Solution



Dahua HDCVI products include both DVRs and Cameras, please go to [www.dahuasecurity.com](http://www.dahuasecurity.com) for more details.



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\*Design and specifications are subject to change without notice.

HDCVI - 01, Oct 2013



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