

## DH-IPC-HDBW2300R-Z/VF

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3MP Full HD Water-Proof & Vandal-Proof Network IR Dome Camera



### Features

- 1/3" 3Megapixel progressive CMOS
- H.264 & MJPEG dual-stream encoding
- Max 20fps@3M(2048x1536)&25/30fps@1080P(1920 x1080)
- DWDR, Day/Night(ICR), 3DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 2.7~12mm varifocal lens
- Max IR LEDs Length 30m
- IP66, IK10, PoE

## DH-HAC-HFW1100R-VF

1Megapixel 720P Water-proof HDCVI IR-Bullet Camera



### Features

- 1/2.9" 1Megapixel CMOS
- 25/30fps@720P
- High speed, long distance real-time transmission
- Day/Night(ICR), AWB, AGC, BLC, 2D-DNR
- 2.7~12mm vari-focal lens
- Max. IR LEDs length 30m, Smart IR
- IP66, DC12V

# DH-HAC-HDW2231R-Z

## 2MP Starlight HDCVI IR Eyeball Camera

### HDCVI



- Starlight, 120dB true WDR, 3DNR
- Max 30fps@1080P
- HD and SD output switchable
- 2.7-13.5mm motorized lens
- Max. IR length 60m, Smart IR
- IP67, DC12V



#### System Overview

Experience 1080P full HD video and the simplicity of reusing existing coaxial infrastructure with HDCVI. The Starlight HDCVI camera with 120dB true WDR presents a high quality image with rich details even in extreme low-light conditions. It offers various motorized/fixed lens models with a multi-language OSD and HD/SD switchable output. Its superior image performance and starlight feature makes the camera an ideal choice for mid to large-size businesses and projects where both highly reliable surveillance and construction flexibility are needed.

#### Functions

##### 4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals to be transmitted over 1 coaxial cable simultaneously, i.e. video, audio\*, data and power. Dual-way data transmission allows the HDCVI camera to interact with the HCVR, such as sending control signal or triggering alarm. Moreover, HDCVI technology supports PoC for construction flexibility.

\* Audio input is available for some models of HDCVI cameras

##### Long Distance Transmission

HDCVI technology guarantees long-distance and real-time transmission without any loss. It supports up to 800m for 1080P Full HD video via coaxial cable, and up to 300m via UTP cable.\*

\*Actual results verified by real-scene testing in Dahua's test laboratory

##### Simplicity

HDCVI technology inherits the born feature of simplicity from traditional analog surveillance system, making itself a best choice for investment protection. HDCVI system can seamlessly upgrade the traditional analog system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

##### Starlight

With the adoption of high performance sensor, the camera is able to provide incomparable performance even under extreme lowlight environment. The starlight feature allows more details to be captured and accurate color to be recognized at night or in scenes with limited illumination.

##### Wide Dynamic Range

Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. True WDR (120dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

##### Advanced 3DNR

3DNR is noise reduction technology that detects and eliminates random noises by comparing two sequential frames. Dahua's advanced 3DNR technology allows remarkable noise reduction with little impact to sharpness, especially under limited lighting condition. Besides, the advanced 3DNR effectively decreases the band width and saves the storage space.

##### Multi-formats

The camera supports multiple video formats including HDCVI, CVBS and other two common HD analog formats in the market. The four formats can be switched over through OSD menu or by PFMS20 (UTC controller). This feature makes the camera to be compatible with not only HCVRs but also most end users' existing HD/SD DVRs.

##### Smart IR

The camera is designed with array LED IR illumination for best lowlight performance. Smart IR is a technology to ensure brightness uniformity in B/W image under low illumination. Dahua's unique Smart IR adjusts to the intensity of camera's infrared LEDs to compensate for the distance of an object, and prevents IR LEDs from overexposing images as the object come closer to the camera.

##### Large Aperture Lens

The camera adopts high-end F1.3 large aperture lens. With higher amount of absorbed light, the camera presents an impressive lowlight performance.

##### Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67, making it suitable for indoor or outdoor environments.

With working temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments.

Supporting ±25% input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

# SNV-L6083R

2Megapixel Full HD Vandal-Resistant Network IR Dome Camera

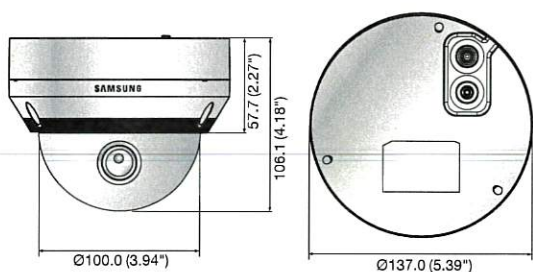


## Key Features

- Max. 2M (1920 x 1080) resolution
- 2.8 ~ 12mm (4.3x) varifocal lens
- 0.095Lux@F1.4 (Color), 0Lux@F1.4 (B/W : IR LED on)
- 30fps@all resolutions (H.264)
- H.264, MJPEG dual codec, Multiple streaming
- Motion detection, Tampering
- micro SD/SDHC memory slot, PoE
- IR viewable length 20m, IP66, IK10
- Hallway view support (Rotate 90°/270°)
- LDC support (Lens Distortion Correction)

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



\* Data recorded on an SD memory card may be lost or damaged by data access during power off, mechanical shock, memory card detachment, or other operations. Data loss or damage can also occur when a memory card reaches end of life, which varies according to operational conditions. No guarantee is given against damage (including passive damage).

## SNV-L6083RN/P

<b>VIDEO</b>	
Imaging Device	1/2.9" 2.19M CMOS
Total Pixels	2,000(H) x 1,121(V)
Effective Pixels	1,984(H) x 1,105(V)
Scanning System	Progressive
Min. Illumination	Color : 0.095Lux (1/30sec, F1.4), 0.002Lux (2sec, F1.4) B/W : 0Lux (IR LED on)
<b>LENS</b>	
Focal Length (Zoom Ratio)	2.8 ~ 12mm (4.3x) varifocal
Max. Aperture Ratio	F1.4
Angular Field of View	H : 103.8°(Wide) ~ 32.4°(Tele) / V : 53.7°(Wide) ~ 18.4°(Tele) / D : 121.9°(Wide) ~ 37.1°(Tele)
Min. Object Distance	0.5m (1.64ft)
Focus Control	Manual
Lens Type	DC auto iris
Mount Type	Board type
<b>PAN / TILT / ROTATE</b>	
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
<b>OPERATIONAL</b>	
IR Viewable Length	20m (65.62ft)
Camera Title	Off / On (Displayed up to 15 characters)
Day & Night	True Day & Night
Backlight Compensation	Off / BLC
Contrast Enhancement (DWDR)	SSDR (Samsung Super Dynamic Range) (Off / On)
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangular zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Flip / Mirror / Hallway view
Intelligent Video Analytics	Motion detection with metadata, Tampering
Alarm Triggers	Motion detection, Tampering detection, SD card error, NAS error
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.264, MJPEG
Resolution	1920 x 1080, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 720 x 576, 640 x 480, 320 x 240
Max. Framerate	H.264 : Max. 30fps at all resolutions MJPEG : Max. 1fps at 1920 x 1080, 1280 x 960, 1280 x 720, 1024 x 768 Max. 15fps at other resolution
Video Quality Adjustment	H.264 : Target bitrate level control, MJPEG : Quality level control
Bitrate Control Method	H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
Audio I/O	Line in
Audio Compression Format	G.711 u-law / G.726 selectable G.726 (ADPCM) 8KHz, G.711 8KHz, G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps
Audio Communication	Uni-directional audio
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP/UDP, RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, CoS, PIM-SM, UPnP, Bonjour
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x authentication
Streaming Method	Unicast / Multicast
Max. User Access	6 users at unicast mode
Storage	micro SD/SDHC max. 32G, NAS - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF Profile S, G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek, Norwegian, Finnish
Web Viewer	Supported OS : Windows XP / VISTA / 7 / 8 / 8.1, MAC OS X 10.7 ~ 10.10 Supported Browser : Microsoft Internet Explorer (Ver. 8 ~ 11), Mozilla Firefox (Ver. 9 ~ 35), Google Chrome (Ver. 15 ~ 40), Apple Safari (Ver. 8.0.2 (Mac OS X 10.10), 7.0.6 (Mac OS X 10.9), 6.0.2 (Mac OS X 10.8, 10.7 only), 5.1.7) * Mac OS X only
Central Management Software	SmartViewer
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH * Start up should be done at above -20°C (-4°F)
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	IK10
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class2)
Power Consumption	Max. 5.8W
<b>MECHANICAL</b>	
Color / Material	Ivory / Metal
Dimensions (WxH)	Ø137.0 x 106.1mm (Ø5.39 x 4.18")
Weight	670g (1.48 lb)

\* The latest product information / specification can be found at [www.samsungsecurity.com](http://www.samsungsecurity.com)