



Product Catalog

- 2011 Digital Surveillance Solution -



■ H.264 Hybrid DVR

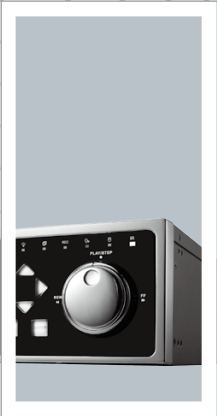
■ Megapixel IP Camera

■ High Speed Dome Camera

■ Application

■ System Diagram

Delivering today while building for the future



About DynaColor

DynaColor specializes in video surveillance products and CRT/LCD AOI systems. Headquartered in Taipei since 1991, DynaColor has achieved continuous growth and market recognition.

Digital Surveillance Solution

DynaColor designs and manufactures digital surveillance products, including speed dome cameras, megapixel IP cameras, digital video recorders (DVRs), multiplexers, video servers, and keyboard controllers. These products are used in various places, including retail stores, government facilities, schools, city halls, airports, military sites, prisons, parks, streets, banks, shopping malls, stadiums, and a wide range of other medium and high security applications.

DynaColor delivers digital surveillance solutions for small and large applications, from the very simple surveillance task with only a few cameras for small stores and buildings, to large installations with complex networks and needs.

A Reputation of Quality

DynaColor has established an excellent reputation not only in digital surveillance products, but also in the LCD AOI system and industrial cameras. Quality is controlled during every phase of development, as DynaColor is ISO-9001 certified by DNV.

Technological advances and customer orientation are the keys to DynaColor's success in a rapidly changing market.

Through focused management and revenue-based incentive programs, DynaColor has quickly identified, executed, and excelled every planned product. By working closely with our partners, many well-known companies worldwide, DynaColor constantly improves our technology, operation, quality control, and manufacturing.

It is our goal to become the leading provider of innovative products and a reliable business partner in each of our targeted sectors.

DynaColor has established overseas branches in Irvine, California and in Tokyo, Japan to facilitate sales activities and services for our customers abroad. To learn more about DynaColor, please visit our web sites:

<http://www.dynacolor.com.tw>

<http://www.dynacolorusa.com>

<http://www.dynacolor.co.jp>

Corporate Strategy

- Technology-Driven:

Enrich professional man-power, acquire and develop core technology.

- Strategic Alliance

Expand worldwide cooperative partnerships through technical alliance, marketing alliance and application alliance, 3 perspectives to provide professional total solutions and services.

- Niche Products

Provide full featured and value-added products, be customer orientated, and meet various market needs.

Greetings from CEO

For more than 20 years, DynaColor dedicates itself to be an "image solution provider." Starting with award-winning CRT alignment system, DynaColor became the industry leader in high quality, cost effective multiplexer and industrial camera over the years. In the rapidly changing digital surveillance market, DynaColor develops a wide range of competitive products, which offer our clients a comprehensive product portfolio and the flexibility for customization.

We believe having a strong R&D team is the foundation to providing our customers innovative solutions. With highly experienced engineers (over 50% of total employees) in DynaColor, we can assure our clients the competitiveness and reliability of our products. Through OEM projects, commissioned by top brands around the world, we possess the critical know-how and credentials to serve our clients in accordance to their specific needs. We adopt the ISO 9001 standard to regulate our administrative process and to ensure strict quality control process. It is our commitment to quality, innovation and customer support that provides our clients the advantage to excel in the ever evolving and highly competitive market.

In the new millennium, amid optimistic prospect yet challenged by fierce competition in the industry, DynaColor will focus on providing our customers the total video surveillance solution, synchronizing video camera products, digital video recorders and system control units. With our advanced video processing technology, solid system integration credential and competence in customized products, we believe DynaColor is the solution for your video surveillance requirement.



H.264 DVR

H.264 D1 Real-time Hybrid DVR

 DG600 II Series.....	P04~P05
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H.264 D1 Real-time DVR

 DG80 II Series.....	P06~P07
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H.264 CIF Real-time DVR

 L80 II Series.....	P08~P09
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IP Camera

3.0 Megapixel High Sensitivity Sony CMOS Sensor IP Camera

 NH063 Series.....	P12
 NH053 Series.....	P12
 NH073 Series.....	P13
 NH223/NH323 Series.....	P13

1.3 Megapixel Sony CCD/CMOS Sensor IP Camera

 NH061 Series.....	P16
 NH071 Series.....	P16
 NH102 Series.....	P17
 NH221 Series.....	P17

2.0/5.0 Megapixel, Dual Streams 1080P + D1 Real-time IP Camera

 W6 Series.....	P20
 W5 Series.....	P20
 W1 Series.....	P21
 W2 / W3 Series.....	P21

Full HD Real-time IP Camera

 V6 Series.....	P24
 V5 Series.....	P24
 V1 Series.....	P25
 V2 / V3 Series.....	P25

Network Camera

Full HD Speed Dome IP Camera



NH720/820 Series.....P28~P29

D1 Real-time, 3D-deinterlace Speed Dome IP Camera



DH701e/801+e S Series.....P30~P31



DH510e/610e Series.....P34~P35

Analog Camera

Integrated Speed Dome Camera



DH701/801+S Series.....P30~P31



DH510/610 Series.....P34~P35

IP Camera Tester

DT1.....P38

Central Management Server

iCMS.....P40

Video Storage Server

VSS.....P41

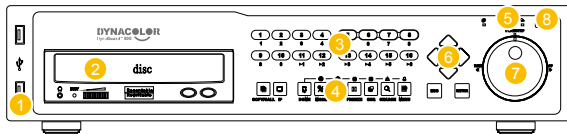
H.264 DVR

network DynaGuard™ 600 II Series



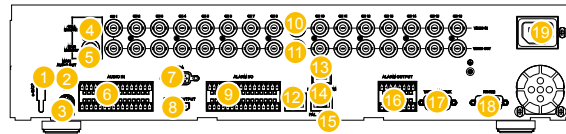
Premium H.264 Hybrid DVR

Front Panel



- | | |
|------------------------|------------------|
| 1 USB 2.0 Ports | 5 LEDs |
| 2 DVD/RW or Cartridge* | 6 Direction Keys |
| 3 Channel Keys | 7 Jog / Shuttle |
| 4 Function Keys | 8 Power Key |

Rear Panel



- | | |
|-----------------------------|---------------------------------|
| 1 eSATA Port (reserved) | 10 Video Input |
| 2 Main Audio Output | 11 Video Looping |
| 3 S-Video Output | 12 NAS Port (reserved) |
| 4 Call Monitor Output (BNC) | 13 USB 2.0 Port |
| 5 Main Monitor Output (BNC) | 14 LAN 10/100/1000 Mbps (RJ-45) |
| 6 Audio Input | 15 NTSC / PAL Switch |
| 7 VGA Output | 16 Alarm Output |
| 8 Digital Display Output | 17 Matrix Output |
| 9 Alarm I/O and RS-485 | 18 RS-232 |
| | 19 Power Jack |

Features

Advanced Functions

- H.264 / MPEG-4 / MJPEG compression
- NEW** • Up to 4/8/16CH D1 real-time recording / playback
- NEW** • Support Full HD 1080P output
- NEW** • Up to 20CH analog and IP video display
- Up to 8CH IP camera recording
- Megapixel video recording
- Pentaplex operation
- NEW** • Dual streams
- NEW** • Privacy Masks
- Flexible user management
- Per channel configuration
- NTP support for time synchronization
- Integrated WLAN, SMS
- Built-in Pelco Coaxitron® protocol
- POS function: transaction monitoring
- Digital display output
- Dual-gigabit LAN ports
- 4/8/16CH audio recording
- Mobile View software (iPhone support)
- DynaRemote™ for remote monitoring
- DynaGuard™ CMS for video management

Humane Technology

- GUI
- USB mouse / USB keyboard*
- Control keyboard*
- IR remote control
- Jog / Shuttle
- NEW** • UPnP™
- Exports AVI files for Microsoft® Media Player
- NEW** • Intelligence Playback Search

Modular Upgrade Kits

- NEW** • V / U Module (DG600 II S only) for real-time recording
- NEW** • Matrix Module for additional 4 call monitors and alarm relay outputs
- NEW** • Mirroring Module for RAID 1/ RAID 10 function
- Alarm Hub for 16CH alarm relay output
- NEW** • D7324 for long distance remote control

Note: Items marked with an asterisk (*) are optional

Specification

Item	DG604 II S		DG608 II S / V		DG616 II S / U	
Video						
Operation System	Embedded (Linux)					
Video Standard	NTSC / PAL Switch Selectable					
Display Resolution	1920 x 1080P pixels					
Input	BNC × 4, 1.0 Vp-p, 75 ohm		BNC × 8, 1.0 Vp-p, 75 ohm		BNC × 16, 1.0 Vp-p, 75 ohm	
Input IP Devices	Up to 8CH		Up to 8CH		Up to 8CH	
Outputs	Main Monitor	BNC × 1, S-Video × 1, 1.0 Vp-p, 75 ohm				
	Call Monitor	BNC × 1, 1.0 Vp-p, 75 ohm				
	Loop	BNC × 4, 1.0 Vp-p, 75 ohm	BNC × 8, 1.0 Vp-p, 75 ohm		BNC × 16, 1.0 Vp-p, 75 ohm	
Digital Display Output	800 x600, 1024 × 768, 1280 × 1024, 720P, 1080P pixels					
VGA Output	800 x600, 1024 × 768, 1280 × 1024, 720P, 1080P pixels					
Picture Refresh Rate	NTSC: 30 pps/per CH; PAL: 25 pps/per CH					
Audio						
Input	Terminal Block × 4, Line-In		Terminal Block × 8, Line-In		Terminal Block × 16, Line-In	
Output	RCA × 1, Line-Out					
Compression Method	ADPCM, G.726					
Data Rate	8 KB/s, per CH					
Recording / Playback						
Compression Method	H.264 (DG600 II S / V / U); MPEG-4 / MJPEG (DG600 II S)					
Recording Mode	Schedule, Alarm, Motion Detection					
Pre-alarm	Yes					
H.264	NTSC 720 × 480	S : Max 120 pps	S / V : Max 120 / 240 pps		S / U : Max 120 / 480 pps	
	PAL 720 × 576	S : Max 100 pps	S / V : Max 100 / 200 pps		S / U : Max 100 / 400 pps	
MPEG-4 / MJPEG	NTSC 720 × 480	S : Max 120 pps	S : Max 120 pps		S : Max 120 pps	
	PAL 720 × 576	S : Max 100 pps	S : Max 100 pps		S : Max 100 pps	
Recording Quality	8 Levels Presets, Adjustable					
Storage Mode	Linear / Circular					
Data Lifetime	Yes, Programmable					
Storage						
Built-in Storage Interface	× 4 SATA for HDD and DVD+RW					
Cartridge / DVD+RW	Optional / Standard					
Export	× 3 USB 2.0 Ports, Support ThumbDrive					
Alarm						
Alarm Input	× 4, Terminal Block (TTL)		× 8, Terminal Block (TTL)		× 16, Terminal Block (TTL)	
Alarm Relay Output	× 2, Terminal Block, 3.0A / DC 30V or 3.0A / AC 125V		× 2, Terminal Block, 3.0A / DC 30V or 3.0A / AC 125V		× 3, Terminal Block, 3.0A / DC 30V or 3.0A / AC 125V	
Alarm Detection	N.C. / N.O., Programmable					
Motion Detection	16 × 12 Grid Array, Sensitivity, Trigger level adjustable					
Video Loss Detection	Programmable					
Communication						
Network Connectivity	RJ-45, 10/100/1000 Mbps Ethernet					
Compatible IP Cameras	DynaColor, Axis, Sony, ACTi, Vivotek, Sanyo					
Remote Control Software	DynaGuard™ CMS, DynaRemote™①					
Remote Operation	Monitoring, Playback, Recording, System setup, Dome camera control, Archiving					
RS-232C	D-SUB 9 pin male					
RS-485	Terminal Block					
Dome Camera Control Protocol	DSCP, Pelco P, Pelco D, AD422, Fastrax 2, Panasonic, JVC					
General						
Unit Dimension (W × H × D)	440 × 90 × 450 mm (17.3 × 3.54 × 17.7 inches)					
Unit Weight	7 Kg (15.42 lbs) with DVD+RW					
Package Dimension (W × H × D)	563 × 197 × 558 mm (22.17 × 7.76 × 22 inches)					
Package Weight	10 Kg (22.03 lbs)					
Operation Temperature	0 °C ~ 40 °C (32 °F ~ 104 °F)					
Relative Humidity	10% ~ 90%, Non-condensing					
Power Consumption & Input	AC 100 ~ 240V, 50-60 Hz, 200W					

Product specification and availability subject to change without notice. Certain product names mentioned herein may be trade names and / or registered trademarks of their companies.

Remark ①: DynaRemote™ Software Requirements:

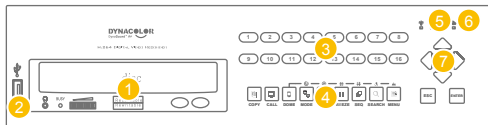
Windows 2000, XP SP2, Vista or Win 7, Intel® Pentium® M 1.40GHZ or faster, 512 MB RAM (1 GB RAM or above is recommended), Microsoft® Internet Explorer 6.0, LAN or Internet connection.

H.264 DVR

network DynaGuard™ 80 II Series

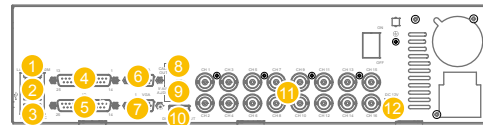


Front Panel



- | | |
|------------------------|------------------|
| ① DVD/RW or Cartridge* | ⑤ LEDs |
| ② USB 2.0 Port | ⑥ IR |
| ③ Channel Keys | ⑦ Direction Keys |
| ④ Function Keys | |

Rear Panel



- | | |
|--------------------------------|------------------------------|
| ① LAN 10/100/1000 Mbps (RJ-45) | ⑦ Main Monitor Output (VGA1) |
| ② USB 2.0 Ports | ⑧ Call Video Output |
| ③ NTSC / PAL Switch | ⑨ Main Audio Output |
| ④ Audio Input (D-SUB) | ⑩ Digital Display Output |
| ⑤ Alarm I/O & RS-485 (D-SUB) | ⑪ Video Input |
| ⑥ Main Monitor Output (VGA2) | ⑫ Power Jack |

Features

Advanced Functions

- H.264 compression
- NEW** • Support Full HD 1080P output
- Quadplex operation
- NEW** • User management
 - Per channel configuration
 - NTP support for time synchronization
 - Motion detection marker
 - Up to 2 internal SATA HDDs
 - Support internal DVD+RW
- NEW** • 4/8/16CH audio recording
- NEW** • Mobile phone support: iPhone, Android, Blackberry
 - DynaRemote™ for remote monitoring
 - DynaGuard™ CMS for video management
- NEW** • Dual streams
 - Support VBR/CBR recording modes

Humane Technology

- GUI
- NEW** • Touch panel
- USB mouse*
- Control keyboard*
- IR remote control

Note: Items marked with an asterisk (*) are optional

Specification

Item	DG84 II	DG88 II	DG86 II		
Video					
Operation System	Embedded (Linux)				
Display Resolution	Up to 1024 × 768 pixels				
Input	BNC × 4, 1.0 Vp-p, 75 ohm	BNC × 8, 1.0 Vp-p, 75 ohm	BNC × 16, 1.0 Vp-p, 75 ohm		
Main Outputs	Digital Display Output	1024 × 768, 1280 × 1024, 1920 × 1080 Pixels			
	VGA	1024 × 768, 1280 × 1024			
Call Monitor	BNC × 1, 1.0 Vp-p, 75 ohm				
Picture Refresh Rate	NTSC: 30 pps/per CH; PAL: 25 pps/per CH				
Audio					
Input	D-SUB × 4, Line-In	D-SUB × 8, Line-In	D-SUB × 16, Line-In		
Output	Main Audio	RCA × 1, Line-Out			
	Call Audio	RCA × 1, Line-Out			
Compression Method	Proprietary				
Data Rate	8 KB/s, per CH				
Recording					
Compression Method	H.264				
Recording Mode	Schedule, Alarm, Motion Detection				
Pre-alarm	Yes				
Recording Resolution & Rate	NTSC	720 × 480	Max 120 pps	Max 240 pps	Max 480 pps
		720 × 240	Max 120 pps	Max 240 pps	Max 480 pps
		360 × 240	Max 120 pps	Max 240 pps	Max 480 pps
	PAL	720 × 576	Max 100 pps	Max 200 pps	Max 400 pps
		720 × 288	Max 100 pps	Max 200 pps	Max 400 pps
		360 × 288	Max 100 pps	Max 200 pps	Max 400 pps
Recording Quality	8 Levels Presets, Adjustable				
Image Size	8 KB to 20 KB/Picture				
Storage Mode	Linear / Circular				
Data Lifetime	Yes, Programmable				
Storage					
Built-in Storage Interface	× 2 SATA for HDD and DVD+RW				
Cartridge / DVD+RW	Optional				
Export	× 2 USB 2.0 Ports, Support ThumbDrive and DVD+RW				
Alarm					
Alarm Input	× 4, D-SUB (TTL)	× 8, D-SUB (TTL)	× 16, D-SUB (TTL)		
Alarm Relay Output	× 1 D-SUB, 1.0A / DC 30 V or 1.0A / AC 120 V				
Alarm Detection	N.C. / N.O., Programmable				
Motion Detection	15 × 15 Grid Array, Sensitivity, Trigger level adjustable				
Video Loss Detection	Programmable				
Communication					
Network Connectivity	RJ-45, 10/100/1000 Mbps Ethernet, Support PPPoE / DDNS / DHCP				
Remote Control Software	DynaGuard™ CMS, DynaRemote™①				
Remote Operation	Monitoring, Playback, Recording, System setup, Dome camera control, Archiving				
RS-485	D-SUB				
IR Remote	Yes				
Dome Camera Control Protocol	DSCP, Pelco P, Pelco D, AD422, Fastrax 2, Panasonic, JVC				
General					
Unit Dimension (W × H × D)	362 × 90 × 350 mm (14.2 × 3.5 × 13.7 inches)				
Unit Weight	5.5 Kg (12.1 lbs)				
Package Dimension (W × H × D)	410 × 210 × 500 mm (16.1 × 8.2 × 19.6 inches)				
Package Weight	7 Kg (15.4 lbs)				
Operation Temperature	0 °C ~ 40 °C (32 °F ~ 104 °F)				
Relative Humidity	10% ~ 90%, Non-condensing				
Power Consumption & Input	AC 100 ~ 240V, 50-60 Hz, 60W adaptor				

Product specification and availability subject to change without notice. Certain product names mentioned herein may be trade names and / or registered trademarks of their companies.

Remark ①: DynaRemote™ Software Requirements:

Windows 2000, XP SP2, Vista or Win7, Intel® Pentium® M 1.40GHZ or faster, 512 MB RAM (1 GB RAM or above is recommended), Microsoft® Internet Explorer 6.0, LAN or Internet connection.

H.264 DVR

network DynaGuard™ L80 II Series



Lite H.264 DVR

Front Panel



- 1 Power Key
- 2 Channel Keys
- 3 IR
- 4 LEDs
- 5 Function Keys
- 6 USB 2.0 Port
- 7 Direction Keys

Rear Panel



- 1 LAN 10/100/1000 Mbps (RJ-45)
- 2 USB 2.0 Port
- 3 Alarm I/O & Audio Input & RS-485 (D-SUB)
- 4 Digital Display Output*
- 5 VGA Port
- 6 Main Monitor Output (BNC)
- 7 Main Audio Output
- 8 Call Monitor Output (BNC)
- 9 Call Audio Output
- 10 Video Input
- 11 Power Jack

Features

Advanced Functions

- H.264 compression
- NEW** • Support Full HD 1080P output
- Quadplex operation
- NEW** • User management
- Per channel configuration
- NTP support for time synchronization
- Motion detection marker
- Up to 2 internal SATA HDDs
- NEW** • 4/8/16CH audio recording
- NEW** • Mobile phone support: iPhone, Android, Blackberry
- DynaRemote™ for remote monitoring
- DynaGuard™ CMS for video management
- NEW** • Dual streams
- Support VBR/CBR recording modes

Humane Technology

- GUI
- USB mouse*
- Control keyboard*
- IR remote control

Note: Items marked with an asterisk (*) are optional

Specification

Item	L84 II		L88 II		L86 II	
Video						
Operation System	Embedded (Linux)					
Display Resolution	Up to 1024 x 768 pixels					
Input	BNC x 4, 1.0 Vp-p, 75 ohm		BNC x 8, 1.0 Vp-p, 75 ohm		BNC x 16, 1.0 Vp-p, 75 ohm	
Main Outputs	Digital Display Output;	1024 x 768, 1280 x 960, 1280 x 1024, 1920 x 1080 Pixels				
	VGA	1024 x 768, 1280 x 960, 1280 x 1024, 1920 x 1080 Pixels				
Call Monitor	BNC x 1, 1.0 Vp-p, 75 ohm					
Picture Refresh Rate	NTSC: 30 pps/per CH, PAL: 25 pps/per CH					
Audio						
Input	D-SUB x 4, Line-In		D-SUB x 8, Line-In		D-SUB x 16, Line-In	
Output	Main Audio	RCA x 1, Line-Out				D-SUB x 1, Line-Out
	Call Audio	RCA x 1, Line-Out				D-SUB x 1, Line-Out
Compression Method	Proprietary					
Data Rate	8 KB/s, per CH					
Recording						
Compression Method	H.264					
Recording Mode	Schedule, Alarm, Motion Detection					
Pre-alarm	Yes					
Recording Resolution & Rate	NTSC	720 x 480	Max 60 pps	Max 60 pps	Max 120 pps	
		720 x 240	Max 120 pps	Max 120 pps	Max 240 pps	
		360 x 240	Max 120 pps	Max 240 pps	Max 480 pps	
	PAL	720 x 576	Max 50 pps	Max 50 pps	Max 100 pps	
		720 x 288	Max 100 pps	Max 100 pps	Max 200 pps	
		360 x 288	Max 100 pps	Max 200 pps	Max 400 pps	
Recording Quality	8 Levels Presets, Adjustable					
Image Size	1 KB to 22 KB/Picture					
Storage Mode	Linear / Circular					
Data Lifetime	Yes, Programmable					
Storage						
Built-in Storage Interface	x 2 SATA for HDD and DVD+RW					
Cartridge / DVD+RW	Optional					
Export	x 2 USB 2.0 Ports, Support ThumbDrive and DVD+RW					
Alarm						
Alarm Input	x 4, D-SUB (TTL)		x 8, D-SUB (TTL)		x 16, D-SUB (TTL)	
Alarm Relay Output	x 1 D-SUB, 1.0A / 30 VDC or 1.0A / 120 VAC					
Alarm Detection	N.C. / N.O., Programmable					
Motion Detection	15 x 15 Grid Array, Sensitivity, Trigger level adjustable					
Video Loss Detection	Programmable					
Communication						
Network Connectivity	RJ-45, 10/100/1000 Mbps Ethernet, Supports PPPoE/ DDNS/ DHCP					
Remote Control Software	DynaGuard™ CMS, DynaRemote™ ^①					
Remote Operation	Monitoring, Playback, Recording, System setup, Dome camera control, Archiving					
RS-485	D-SUB					
IR Remote	Yes					
Dome Camera Control Protocol	DSCP, Pelco P, Pelco D, AD422, Fastra x 2, Panasonic, JVC					
General						
Unit Dimension (W x H x D)	300 x 55 x 180 mm (11.8 x 2.2 x 7.1 inches)					
Unit Weight	1.5 Kg (3.4 lbs)					
Package Dimension (W x H x D)	393 x 139 x 358 mm (15.5 x 5.5 x 14.1 inches)					
Package Weight	2.5 Kg (5.6 lbs)					
Operation Temperature	0 °C ~ 40 °C (32 °F ~ 104 °F)					
Relative Humidity	10% ~ 90%, Non-condensing					
Power Consumption & Input	AC 100 ~ 240V, 50-60 Hz, 60W adaptor					

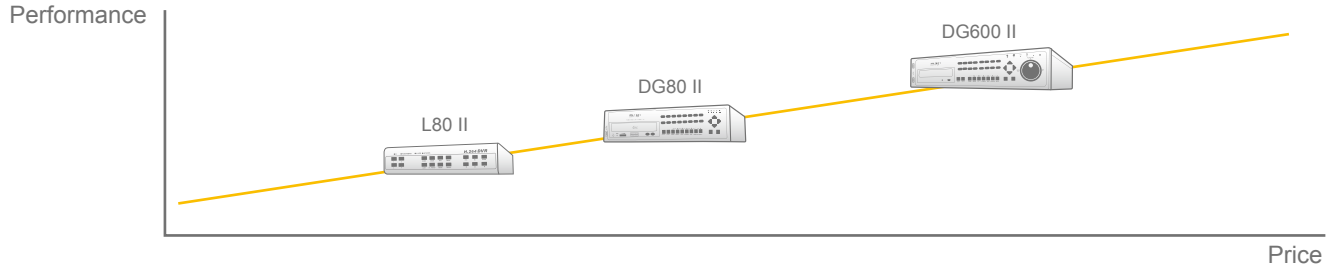
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Windows 2000, XP SP2, Vista or Win7, Intel® Pentium® M 1.40GHZ or faster, 512 MB RAM (1 GB RAM or above is recommended), Microsoft® Internet Explorer 6.0, LAN or Internet connection.

H.264 DVR

Value Chart



Comparison Chart

Feature	Premium H.264 DVR DG600 II Series			Versatile H.264 DVR DG80 II Series			Lite H.264 DVR L80 II Series		
	DG616 II S/ U	DG608 II S/ V	DG604 II S	DG86 II	DG88 II	DG84 II	L86 II	L88 II	L84 II
Recording									
Recording Rate (H.264 @ 720P)	-	-	-	-	-	-	-	-	-
Recording Rate (M / J @ 720P)	-	-	-	-	-	-	-	-	-
Recording Rate (H.264 @ D1)	120/ 480	120/ 240	120	480	240	120	120	60	60
Recording Rate (M / J @ D1)	120/ -	120/ -	120	-	-	-	-	-	-
*Compression Method	H/ M/ J	H/ M/ J	H/ M/ J	H	H	H	H	H	H
IP Camera Compatibility	8	8	8	-	-	-	-	-	-
Per Channel Configuration	●	●	●	●	●	●	●	●	●
Storage									
Max. HDDs	4	4	4	2	2	2	2	2	2
Gigabit LAN Port	●	●	●	●	●	●	●	●	●
USB Ports	3	3	3	2	2	2	2	2	2
DVD Burner	●	●	●	○	○	○	○	○	○
Remote Network									
DynaRemote™ S/W	●	●	●	●	●	●	●	●	●
WLAN / SMS	●	●	●	-	-	-	-	-	-
Upgrade Kits									
Mirroring Module	○	○	○	-	-	-	-	-	-
Matrix Module	○	○	○	-	-	-	-	-	-
V / U Module	-/ ○	○/ -	-	-	-	-	-	-	-
Alarm Hub	○	○	○	○	○	○	○	○	○
Application									
DynaGuard™ CMS	●	●	●	●	●	●	●	●	●
Mobile View S/W	●	●	●	●	●	●	●	●	●
Time Synchronization	●	●	●	●	●	●	●	●	●
UPnP™	●	●	●	-	-	-	-	-	-
Dual Streams	●	●	●	●	●	●	●	●	●
Digital Display Output	●	●	●	●	●	●	●	●	●
Operation Interface									
Jog / Shuttle	●	●	●	-	-	-	-	-	-
USB Mouse	○	○	○	○	○	○	○	○	○
USB Keyboard	○	○	○	○	○	○	○	○	○
IR Remote Control	●	●	●	●	●	●	●	●	●
Compact Control Keyboard	○	○	○	○	○	○	○	○	○
GUI	●	●	●	●	●	●	●	●	●

* : H stands for H.264 compression, M stands for MPEG-4 compression, J stands for MJPEG compression, U and V models don't support MPEG-4 and MJPEG compressions
 ● Support ○ Optional - Not support

The network DynaGuard™ series supports H.264 compression and Megapixel IP camera recording. It keeps all intelligent functions for managing and provides an integrated solution of recording videos from both existing analog cameras and oncoming IP cameras. With the hybrid video-in configurations, it saves the cost of replacement of camera devices in the period of IP transition.

The Central Management System, DynaGuard™ CMS, is a free bundled video management software that allows the administrator to monitor up to 64 live video channels from cameras or DVRs, to record and playback on the PC using instant or schedule recording modes, and to archive the DVR recorded video remotely.

Product Selection



DG6 II-□□

Channels	HDD	Device Option	Video System
04S: 4CH S model	000: None	0: None	P: PAL
08S: 8CH S model	005: 500 GB	M: Cartridge	N: NTSC
08V: 8CH V model	010: 1 TB	D: DVD+RW	
16S: 16CH S model	015: 1.5 TB	R: Mirroring Module	
16U: 16CH U model	020: 2 TB	A: Audio Module	
		T: Matrix Module	



DG08 □ II-□□

Channels	HDD	Device Option	Video System
4: 4CH	000: None	0: None	P: PAL
8: 8CH	005: 500 GB	M: Cartridge	N: NTSC
6: 16CH	010: 1 TB	D: DVD+RW	
	015: 1.5 TB		
	020: 2 TB		



L08 □ II-□□

Channels	HDD	Device Option	Video System
4: 4CH	000: None	0: None	P: PAL
8: 8CH	005: 500 GB	M: Cartridge	N: NTSC
6: 16CH	010: 1 TB	D: DVD+RW	
	015: 1.5 TB		
	020: 2 TB		

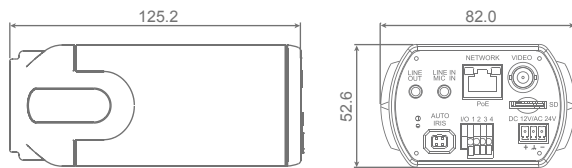
Megapixel IP Camera

NH063 Series SONY 3M • WDR



Premium H.264 IP Camera

Dimension



Unit: (mm)

Features

- Sony Progressive Scan CMOS Sensor
- C/CS mount lens
- NEW** • Dual Streams, Full HD 1080P real-time + D1 real-time
- H.264 and MJPEG compression
- Multi-language support
- NEW** • Tampering Alarm
- NEW** • Wide Dynamic Range
- Motion Detection
- Privacy Masks
- NEW** • Smart Picture Quality / 3D Noise Reduction
- Day/Night (ICR)*
- Auto Iris Lens support*
- Micro SD support
- BNC analog output
- NEW** • RS-485 support*
- **ONVIF** support

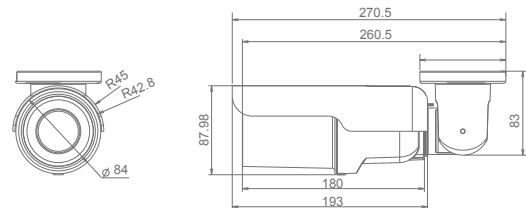
Note: Items marked with an asterisk (*) are optional

NH053 Series SONY 3M • WDR • IR LED



Premium H.264 IP Camera

Dimension



Unit: (mm)

Features

- Sony Progressive Scan CMOS Sensor
- NEW** • Dual Streams, Full HD 1080P real-time + D1 real-time
- H.264 and MJPEG compression
- Multi-language support
- NEW** • Tampering Alarm
- NEW** • Wide Dynamic Range
- NEW** • Remote Zoom & Focus (Motorized Lens)*
- Motion Detection
- Privacy Masks
- NEW** • Smart Picture Quality / 3D Noise Reduction
- Day/Night (ICR)*
- NEW** • IR LED module (working distance up to 30m)*
- Micro SD support
- Weatherproof (IP66 international)
- Sunshield*
- NEW** • Integrated Mounting Bracket with Cable Management
- **ONVIF** support

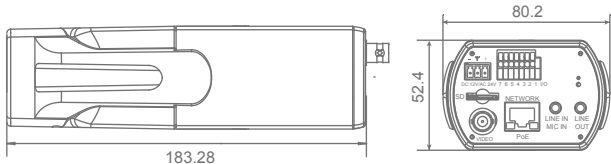
NH073 Series

Full HD • WDR • 10x/18x Zoom



Dimension

18x



Unit: (mm)

Features

- Sony Progressive Scan CMOS Sensor
- NEW** • 10x / 18x Optical Zoom with AF
10x: f= 4.95~49.5 mm; 18x: f= 4.7~84.6 mm
- NEW** • Dual Streams, Full HD 1080P real-time + D1 real-time
- H.264 and MJPEG compression
- Multi-language support
- NEW** • Tampering Alarm
- NEW** • Wide Dynamic Range
- Motion Detection
- Privacy Masks
- NEW** • Smart Picture Quality / 3D Noise Reduction
- Day/Night (ICR)
- Micro SD support
- BNC analog output
- RS-485 support
- **ONVIF** support

Note: Items marked with an asterisk (*) are optional

NH223 / NH323 Series

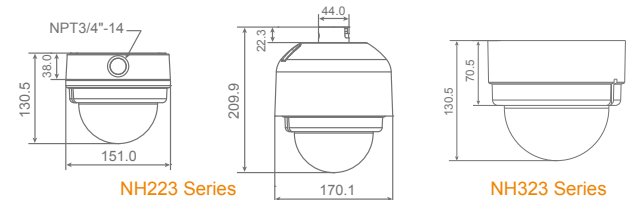
SONY 3M • WDR • Vari-focal



Dimension

Indoor

Outdoor



NH223 Series

NH323 Series

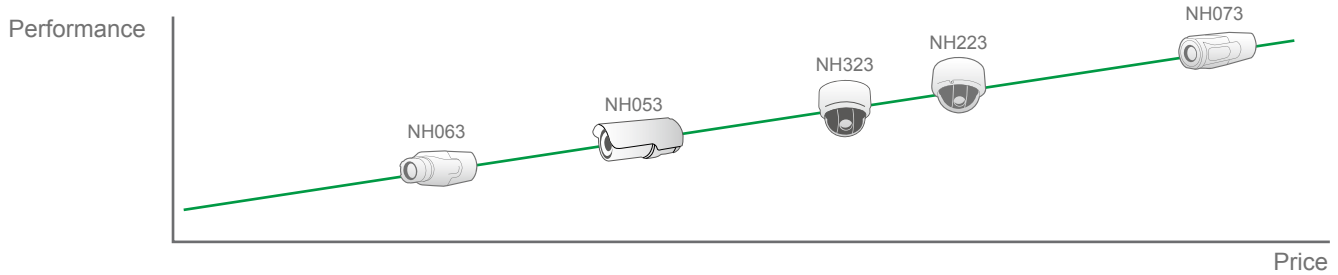
Unit: (mm)

Features

- Sony Progressive Scan CMOS sensor
- NEW** • Dual Streams, Full HD 1080P real-time + D1 real-time
- H.264 and MJPEG compression
- Multi-language support
- NEW** • Tampering Alarm
- NEW** • Remote Zoom & Focus (Motorized Lens)*
- NEW** • Wide Dynamic Range
- Motion Detection
- Privacy Masks
- NEW** • Smart Picture Quality / 3D Noise Reduction
- Day/Night (ICR)*
- NEW** • IR LED module (working distance up to 30m)*
- Micro SD support
- BNC analog output
- Weatherproof (IP66 international)
- Sunshield and Pendent Mount Housing
- Lightweight dome cover (NH323 Series)
- **ONVIF** support

Megapixel IP Camera

Value Chart



Comparison Chart

Item	NH063	NH073	NH053			NH223		NH323	
CMOS	●	●	●	●	●	●	●	●	●
Lens	C/CS mount Motorized VF	10x / 18x AF	fixed focal	Manual VF	Motorized VF	Manual VF	Motorized VF	Manual VF	Motorized VF
Day / Night (ICR)	○	●	○	○	●	○	○	○	○
Audio in	●	●	●	●	●	●	●	●	●
Audio out	●	●	●	●	●	●	●	●	●
Alarm	●	●	●	●	●	●	●	●	●
RS-485	○	●	-	-	-	-	-	-	-
BNC	●	●	-	-	-	●	●	●	●
Micro SD	●	●	●	●	●	●	●	●	●
Vandal proof	-	-	-	-	-	●	●	-	-
Weatherproof (IP66)	-	-	●	●	●	●	●	-	-

● Support ○ Optional - Not support

Specification

Item	Full HD Multiple Streams IP Camera
Camera	
Image Sensor	1/2.8" Sony Progressive Scan CMOS
Picture Elements	2048(H) × 1536(V)
Shutter Speed	1~1/10000 sec.
White Balance	Manual / AWB / ATW
Digital Zoom	Support
Operation	
Video Compression	H.264 / MJPEG
Video Stream & Frame Rate	Single Stream: H.264 2048 x 1536 (12.5/15 fps) Dual Streams, H.264 1080P (25/30 fps) + MJPEG D1 (25/30 fps) Dual Streams, H.264 1080P (25/30 fps) + H.264 D1 (25/30 fps)
Resolution	H.264: 2048 × 1536 / Full HD 1080P / SXGA / HD 720P / XGA / SVGA / D1 / VGA / CIF MJPEG: Full HD 1080P / SXGA / HD 720P / XGA / SVGA / D1 / VGA / CIF
Image Setting	Exposure, White Balance, Brightness, Sharpness, Contrast, Saturation, Hue, WDR, Image rotation, Motion detection, Tampering Alarm, Privacy Mask, 3DNR, Smart Picture Quality
Audio	Line Out, Line In/Mic In
Alarm	Input: 5V 10kΩ pull up Output: Photo relay output DC/AC 300V
Event Notification	HTTP, FTP, SMTP
Network	
Interface	RJ-45, 10/100 Mbps Ethernet
Protocol	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, IEEE802.1X, ONVIF
Security	HTTPS, IP Filter, IEEE 802.1X
Password Levels	User and Administrator
Internet Browser	Internet Explorer (6.0+), Chrome, Firefox, Safari
User Account	20
General	
Operating Temperature	-10°C ~ 50°C (14° ~ 122° F)
Power Source	Humidity: 10% to 90%, Non-condensing
Power Consumption	DC 12V / AC 24V / PoE 4W+
Certificate	CE, FCC, RoHS compliant

Product specification and availability subject to change without notice. Certain product names mentioned herein may be trade names and / or registered trademarks of their companies.

Product Selection



NH063-

Solution B: Full HD real-time + D1 real-time C: 3 Megapixel	Lens type 0: CS mount type 1: CS mount type, D/N	Power 0: DC 12V / PoE A: DC 12V / AC 24V / PoE
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NH053-

Solution B: Full HD real-time + D1 real-time C: 3 Megapixel	Lens type H: 4.0 mm, F1.5, D/N X: Vari-focal 3.0 ~ 9.0 mm, F1.2 Y: Vari-focal 3.0 ~ 9.0 mm, F1.2, D/N Z: Motorized Vari-focal 3.0 ~ 9.0 mm, F1.2, D/N	Application 0: None 1: w/ Sunshield 2: w/ IR LED 3: w/ Sunshield & IR LED
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*Motorized Lens will be available in Q4 2011



NH073-

Solution 01: Full HD real-time + D1 real-time, 10x 02: Full HD real-time + D1 real-time, 18x	Connectors 0: Standard
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*10x Zoom lens: 4.95 ~ 49.5mm, F1.6 ~ 2.0
 18x Zoom lens: 4.7 ~ 84.6mm, F1.6 ~ 2.8



NH223-

Solution B: Full HD real-time + D1 real-time C: 3 Megapixel	Lens type X: Vari-focal 3.0 ~ 9.0 mm, F1.2 Y: Vari-focal 3.0 ~ 9.0 mm, F1.2, D/N Z: Motorized Vari-focal 3.0 ~ 9.0 mm, F1.2, D/N	Application 0: Indoor 3: Indoor, w/ IR LED A: Outdoor, w/ H & F B: Outdoor, w/ H & F, w/ IR LED
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*H & F: Heater & Fan

**Motorized Lens will be available in Q4 2011



NH323-

Solution B: Full HD real-time + D1 real-time C: 3 Megapixel	Lens type X: Vari-focal 3.0 ~ 9.0 mm, F1.2 Y: Vari-focal 3.0 ~ 9.0 mm, F1.2, D/N Z: Motorized Vari-focal 3.0 ~ 9.0 mm, F1.2, D/N	IR LED 0: None 1: IR LED
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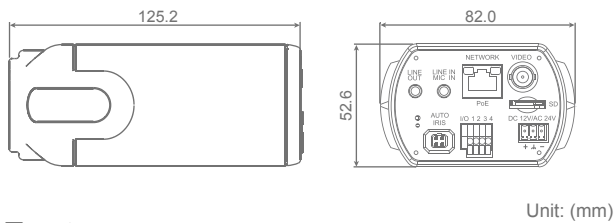
*Motorized Lens will be available in Q4 2011

Megapixel IP Camera

NH061 Series HD • Real-time • WDR



Dimension



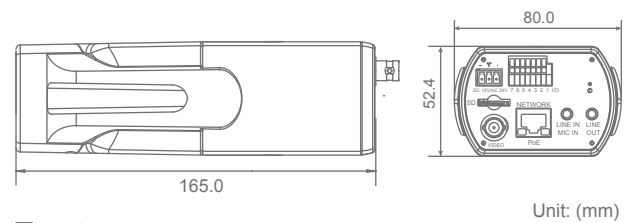
Features

- Sony Progressive Scan CCD/CMOS Sensor
- NEW** • HD 720P real-time at dual stream
- H.264, MJPEG and MPEG-4 compression
- NEW** • Integrated real-time WDR
- NEW** • 2D / 3D Noise Reduction
- Motion Detection
- Privacy Masks
- Day/Night (ICR)
- Micro SD support
- BNC analog output
- **ONVIF** support

NH071 Series HD • Real-time • WDR • 10× Zoom



Dimension



Features

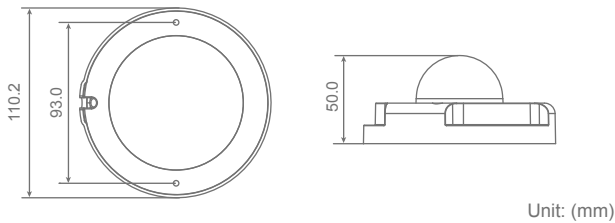
- Sony Progressive Scan CCD/CMOS Sensor
- NEW** • HD 720P real-time at dual stream
- H.264, MJPEG and MPEG-4 compression
- 10× Optical Zoom with AF
f = 4.95 ~ 49.5 mm
- NEW** • Integrated real-time WDR
- NEW** • 2D / 3D Noise Reduction
- Motion Detection
- Privacy Masks
- Day/Night (ICR)
- Micro SD support
- RS-485 support
- BNC analog output
- **ONVIF** support

NH102 Series

HD • Real-time • Compact



Dimension



Features

- Sony Progressive Scan CMOS Sensor
- NEW** • HD 720P real-time at dual stream
- H.264 and MJPEG compression
- $f = 4.3 \text{ mm}$, F1.8
- Motion Detection
- Privacy Masks
- Micro SD Support
- Weatherproof Dongle Cable*
- Weatherproof (IP66 international)
- Security Torx against tampering
- **ONVIF** support

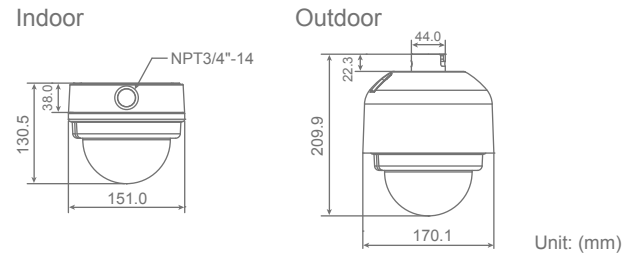
Note: Items marked with an asterisk (*) are optional

NH221 Series

HD • Real-time • WDR • Vandal Proof



Dimension

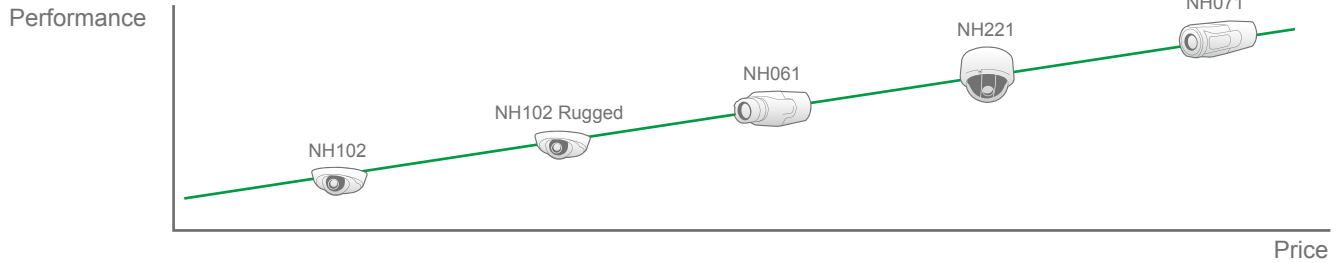


Features

- Sony Progressive Scan CCD/CMOS Sensor
- NEW** • HD 720P real-time at dual stream
- H.264, MJPEG and MPEG-4 compression
- Vari-focal $f = 3.3 \sim 12 \text{ mm}$
- NEW** • Remote Zoom & Focus (Motorized Lens)*
- NEW** • Integrated real-time WDR
- NEW** • 2D / 3D Noise Reduction
- Motion Detection
- Privacy Masks
- Day/Night (ICR)
- Micro SD support
- BNC analog output
- Weatherproof (IP66 international)
- Vandal proof dome cover
- NEW** • Sun Shield & Outdoor Mounting Kit
- **ONVIF** support

Megapixel IP Camera

Value Chart



Comparison Chart

Item	NH102	NH102 Rugged	NH061	NH221	NH071
CCD	-	-	•	•	•
CMOS	•	•	•	•	-
Lens	fixed focal	fixed focal	C/CS mount	Motorized VF Manual VF	10× AF
ICR	-	-	○	○	•
Built-in Mic	○	-	-	-	-
Audio in	•	-	•	•	•
Audio out	-	-	•	•	•
Alarm	-	-	•	•	•
RS-485	-	-	-	-	•
BNC	-	-	•	•	•
Micro SD	○	○	•	•	•
Vandal proof	-	-	-	•	-
Weatherproof (IP66)	-	•	-	•	-

• Support ○ Optional - Not support

Specification

Item	CCD Cameras	CMOS Cameras
Camera		
Image Sensor	Sony 1/3" Progressive Scan CCD	Sony 1/3" Progressive Scan CMOS
Picture Elements	1280(H) × 960(V)	1280(H) × 1024(V)
Minimum Illumination	0.03 lux @ F1.2 (Color) 0.001 lux @ F1.2 (B/W)	0.03 lux @ F1.2 (Color) 0.001 lux @ F1.2 (B/W)
Shutter Speed	1~ 1/10000 sec.	
White Balance	Manual / ATW (1500 ~ 15000 K)	
Digital Zoom	1× ~ 16×	
Operation		
Video Compression	H.264 / MJPEG / MPEG-4	
Video Streaming	Simultaneously, H.264 + H.264	
	Simultaneously, H.264 + MJPEG	
	Simultaneously, MPEG-4 + MJPEG Simultaneously, MJPEG + BNC	
Resolution	H.264: 1280 × 960 / HD 720p / D1 / VGA / QVGA / CIF / QCIF MJPEG: 1280 × 960 / HD 720p / D1 / VGA / QVGA / CIF / QCIF MPEG-4: 1280 × 960 / HD 720p / D1 / VGA / QVGA / CIF / QCIF	H.264: 1280 × 1024 / HD 720p / D1 / VGA / QVGA / CIF / QCIF MJPEG: 1280 × 1024 / HD 720p / D1 / VGA / QVGA / CIF / QCIF MPEG-4: 1280 × 1024 / HD 720p / D1 / VGA / QVGA / CIF / QCIF
Frame Rate	12.5/15 fps @ 1280 × 960 25/30 fps @ 720p	12.5/15 fps @ 1280 × 1024 25/30 fps @ 720p
Image Setting	Brightness, Exposure, Sharpness, Contrast, White Balance, Image rotation, WDR, 3DNR	
Audio	Two-way Audio	
Alarm	Input	5V 10kΩ pull up
	Output	Photo relay output 300V DC/AC
Event Notification	HTTP, FTP, SMTP	
Multiple Languages	English, French, German, Italian, Simplified Chinese	
Network		
Interface	RJ-45, 10/100 Mbps Ethernet	
Protocol	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF	
Password Levels	User and Administrator	
Security	HTTPS, IP Filter	
Internet Browser	Internet Explorer (6.0+), Chrome, FireFox	
User Account	20	
General		
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)	
Power Source	Humidity: 10% to 90%, Non-condensing	
Power Consumption	6W+	4.5W+
Certificate	CE, FCC, RoHS compliant	

Product Selection



NH061-

Sensor 3: Sony 1.3M CCD 5: Sony 1.3M CMOS	Lens Type 0: CS mount type 1: CS mount type, D/N	Power 3: DC 12V / AC 24V / PoE	Connectors 0: Standard	Power Plug 0: None
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NH071-

Sensor 3: Sony 1.3M CCD	Lens Type T: 10x zoom; 4.95 ~ 49.5 mm, D/N	Power 3: DC 12V / AC 24V / PoE	Connectors 0: Standard	Power Plug 0: None
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NH102-

Sensor 5: Sony 1.3M CMOS	Lens Type 2: 4.3 mm	Power 4: PoE	Connectors 1: Micro SD	Ethernet 0: RJ-45 M: M12 R: RJ-45 Cable	Microphone 0: w/o 1: w/
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NH221-

Sensor 3: Sony 1.3M CCD 5: Sony 1.3M CMOS	Lens Type A: Vari-focal 3.3 ~ 12 mm B: Vari-focal 3.3 ~ 12 mm, D/N C: Motorized Vari-focal 3.3 ~ 12 mm, D/N	Power 3: DC 12V / AC 24V / PoE	Connectors 0: Standard	Power Plug 0: None	Heater & Fan 0: Indoor B: Outdoor w/ H & F
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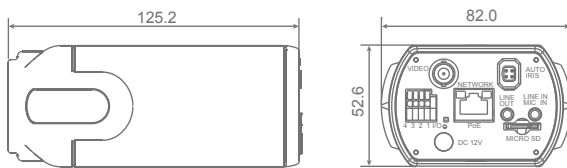
*H & F: Heater & Fan

Megapixel IP Camera

W6 Series Full HD • Multiple Streams



Dimension



Unit: (mm)

Features

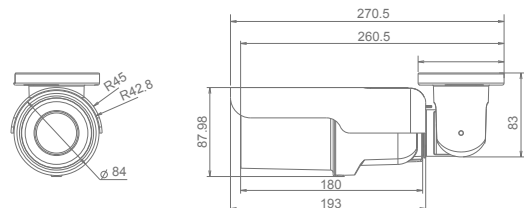
- Progressive Scan CMOS Sensor
- NEW** • Up to 10M resolution (2M / 5M / 10M)*
- C/CS mount lens
- NEW** • Dual Streams, Full HD 1080P real-time + D1 real-time
- H.264 and MJPEG compression
- NEW** • Multi-language support
- NEW** • Tampering Alarm
- NEW** • Wide Dynamic Range
- Motion Detection
- Privacy Masks
- NEW** • Smart Picture Quality / 3D Noise Reduction
- Day/Night (ICR)*
- Auto Iris Lens support*
- Micro SD support*
- BNC analog output*
- NEW** • RS-485 support*
- **ONVIF** support

Note: Items marked with an asterisk (*) are optional

W5 Series Full HD • Multiple Streams • IR LED



Dimension



Unit: (mm)

Features

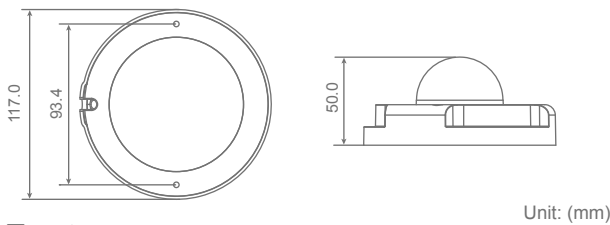
- Progressive Scan CMOS Sensor
- NEW** • Dual Streams, Full HD 1080P real-time + D1 real-time
- H.264 and MJPEG compression
- NEW** • Multi-language support
- NEW** • Tampering Alarm
- NEW** • Wide Dynamic Range
- Remote Zoom & Focus (Motorized Lens)*
- Motion Detection
- Privacy Masks
- NEW** • Smart Picture Quality / 3D Noise Reduction
- Day/Night (ICR)*
- IR LED module (working distance up to 30m)*
- Micro SD support
- Weatherproof (IP66 international)
- Sunshield*
- NEW** • Integrated Mounting Bracket with Cable Management
- **ONVIF** support

W1 Series

Full HD • Multiple Streams • Compact



Dimension



Features

- Progressive Scan CMOS Sensor
- f = 4 mm, F1.5
- NEW** • Dual Streams, Full HD 1080P real-time + D1 real-time
- H.264 and MJPEG compression
- NEW** • Multi-language support
- NEW** • Tampering Alarm
- NEW** • Wide Dynamic Range
- Motion Detection
- Privacy Masks
- NEW** • Smart Picture Quality / 3D Noise Reduction
- Weatherproof Dongle Cable*
- Weatherproof (IP66 international)
- Micro SD support*
- Security Torx against tampering
- **ONVIF** support

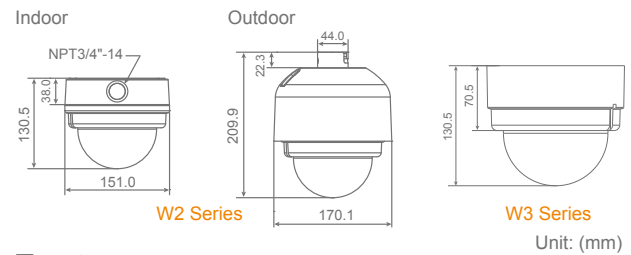
Note: Items marked with an asterisk (*) are optional

W2 / W3 Series

Full HD • Multiple Streams • Vari-focal



Dimension

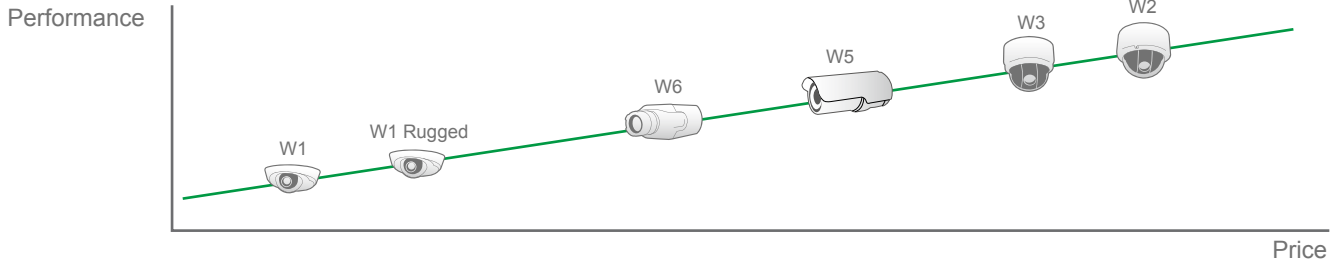


Features

- Progressive Scan CMOS Sensor
- NEW** • Dual Streams, Full HD 1080P real-time + D1 real-time
- H.264 and MJPEG compression
- NEW** • Multi-language support
- NEW** • Tampering Alarm
- Remote Zoom & Focus (Motorized Lens)*
- NEW** • Wide Dynamic Range
- Motion Detection
- Privacy Masks
- NEW** • Smart Picture Quality / 3D Noise Reduction
- Day/Night (ICR)*
- IR LED module (working distance up to 30m)*
- Micro SD support
- BNC analog output
- Weatherproof (IP66 international)
- Sunshield and Pendent Mount Housing
- Lightweight dome cover (W3 Series)
- **ONVIF** support

Megapixel IP Camera

Value Chart



Comparison Chart

Item	W1	W1 Rugged	W6	W5		W3		W2		
CMOS	●	●	●	●	●	●	●	●	●	
Lens	fixed focal	fixed focal	C/CS mount	fixed focal	Manual VF	Motorized VF	Manual VF	Motorized VF	Manual VF	Motorized VF
Day/Night (ICR)	-	-	○	○	○	●	○	●	○	●
Built-in Mic	○	-	-	-	-	-	-	-	-	-
Audio in	●	-	●	●	●	●	●	●	●	●
Audio out	-	-	●	●	●	●	●	●	●	●
Alarm	-	-	●	●	●	●	●	●	●	●
RS-485	-	-	○	-	-	-	-	-	-	-
BNC	-	-	○	-	-	-	●	●	●	●
Micro SD	○	○	○	●	●	●	●	●	●	●
Vandal proof	-	-	-	-	-	-	-	-	●	●
Weatherproof (IP66)	-	●	-	●	●	●	-	-	●	●

● Support ○ Optional - Not support

Specification

Item	Full HD Multiple Streams IP Camera
Camera	
Image Sensor	1/2.7" Progressive Scan CMOS
Picture Elements	1920(H) × 1080(V)
Shutter Speed	1~1/10000 sec.
White Balance	Manual / AWB / ATW
Digital Zoom	Support
Operation	
Video Compression	H.264/ MJPEG
Video Streaming & Frame Rate	Dual Streams, H.264 1080P (25/30 fps) + MJPEG D1 (25/30 fps) Dual Streams, H.264 1080P (25/30 fps) + H.264 D1 (25/30 fps)
Resolution	H.264: Full HD 1080P / SXGA / HD 720P / XGA / SVGA / D1 / VGA / CIF MJPEG: Full HD 1080P / SXGA / HD 720P / XGA / SVGA / D1 / VGA / CIF
Image Setting	Exposure, White Balance, Brightness, Sharpness, Contrast, Saturation, Hue, Image rotation, Motion detection, Tampering Alarm, Privacy Mask, 3DNR, Smart Picture Quality
Audio	Line Out, Line In/Mic In
Alarm	Input: 5V 10kΩ pull up Output: Photo relay output DC/AC 300V
Event Notification	HTTP, FTP, SMTP
Network	
Interface	RJ-45, 10/100 Mbps Ethernet
Protocol	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, IEEE 802.1X, ONVIF
Security	HTTPS, IP Filter, IEEE 802.1X
Password Levels	User and Administrator
Internet Browser	Internet Explorer (6.0+), Chrome, FireFox, Safari
User Account	20
General	
Operating Temperature	-10°C ~ 50°C (14°F ~ 122°F)
	Humidity: 10% to 90%, Non-condensing
Power Source	DC 12V / AC 24V / PoE
Power Consumption	4W+
Certificate	CE, FCC, RoHS compliant

Product specification and availability subject to change without notice. Certain product names mentioned herein may be trade names and / or registered trademarks of their companies.

Product Selection



W6-   

Solution BA: Full HD real-time + D1 real-time CB: 5 Megapixel	Lens type 0 : CS mount type 1 : CS mount type, D/N	Power 1 : DC 12V / PoE A : DC 12V / AC 24V / PoE
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*5 Megapixel: 1/3.2" format, 2592 x 1944 (10fps)



W5-   

Solution B: Full HD real-time + D1 real-time	Lens type H: 4.0 mm, F1.5, D/N X: Vari-focal 3.0 ~ 9.0 mm, F1.2 Y: Vari-focal 3.0 ~ 9.0 mm, F1.2, D/N Z: Motorized Vari-focal 3.0 ~ 9.0 mm, F1.2, D/N	Application 0: None 1: w/ Sunshield 2: w/ IR LED 3: w/ Sunshield & IR LED
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*Motorized Lens will be available in Q4 2011



W1-   

Solution B: Full HD real-time + D1 real-time	Lens type 1: 4.0 mm, F1.5	Application A: RJ-45, Mic B: M12 C: RJ-45 Cable
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W2-   

Solution B: Full HD real-time + D1 real-time	Lens type X: Vari-focal 3.0 ~ 9.0 mm, F1.2 Y: Vari-focal 3.0 ~ 9.0 mm, F1.2, D/N Z: Motorized Vari-focal 3.0 ~ 9.0 mm, F1.2, D/N	Application 0: Indoor 3: Indoor, w/ IR LED A: Outdoor, w/ H & F B: Outdoor, w/ IR LED, w/ H & F
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*H & F: Heater & Fan

**Motorized Lens will be available in Q4 2011



W3-   

Solution B: Full HD real-time + D1 real-time	Lens type X: Vari-focal 3.0 ~ 9.0 mm, F1.2 Y: Vari-focal 3.0 ~ 9.0 mm, F1.2, D/N Z: Motorized Vari-focal 3.0 ~ 9.0 mm, F1.2, D/N	IR LED 0: None 1: IR LED
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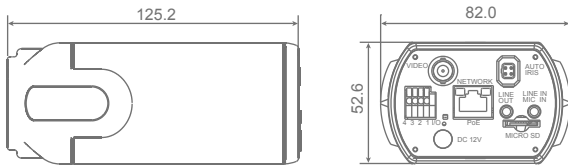
*Motorized Lens will be available in Q4 2011

Megapixel IP Camera

V6 Series
Full HD • Real-time



Dimension



Unit: (mm)

Features

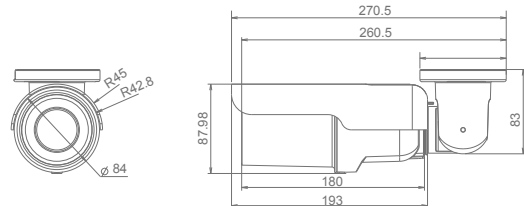
- Progressive Scan CMOS Sensor
- Full HD 1080P / HD 720P real-time at dual stream
- H.264 and MJPEG compression
- NEW** • Multi-language support
- NEW** • Tampering Alarm
- Motion Detection
- Privacy Masks
- Day/Night (ICR)*
- Auto Iris Lens support*
- Micro SD support*
- BNC analog output*
- NEW** • RS-485 support*
- **ONVIF** support

Note: Items marked with an asterisk (*) are optional

V5 Series
Full HD • Real-time • IR LED



Dimension



Unit: (mm)

Features

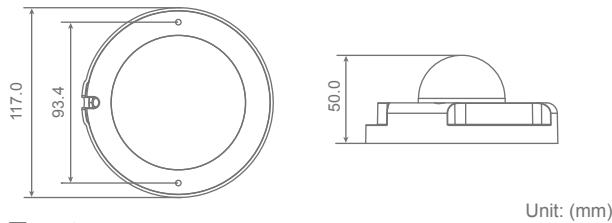
- Progressive Scan CMOS Sensor
- Full HD 1080P / HD 720P real-time at dual stream
- H.264 and MJPEG compression
- NEW** • Multi-language support
- NEW** • Tampering Alarm
- Remote Zoom & Focus (Motorized Lens)*
- Motion Detection
- Privacy Masks
- Day/Night (ICR)*
- IR LED module (working distance up to 30m)*
- Micro SD support
- Weatherproof (IP66 international)
- Sunshield*
- NEW** • Integrated Mounting Bracket with Cable Management
- **ONVIF** support

V1 Series

Full HD • Real-time • Compact



Dimension



Features

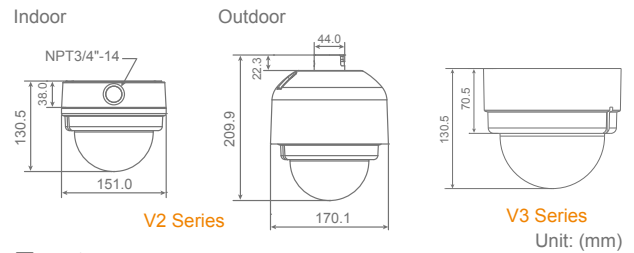
- Progressive Scan CMOS Sensor
- Full HD 1080P / HD 720P real-time at dual stream
- H.264 and MJPEG compression
- NEW** • Multi-language support
- NEW** • Tampering Alarm
- f = 4 mm, F1.5
- Power over Ethernet (802.3af)
- Motion Detection
- Privacy Masks
- Weatherproof Dongle Cable*
- Weatherproof (IP66 international)
- Micro SD support*
- Security Torx against tampering
- **ONVIF** support

V2 / V3 Series

Full HD • Real-time • Vari-focal



Dimension



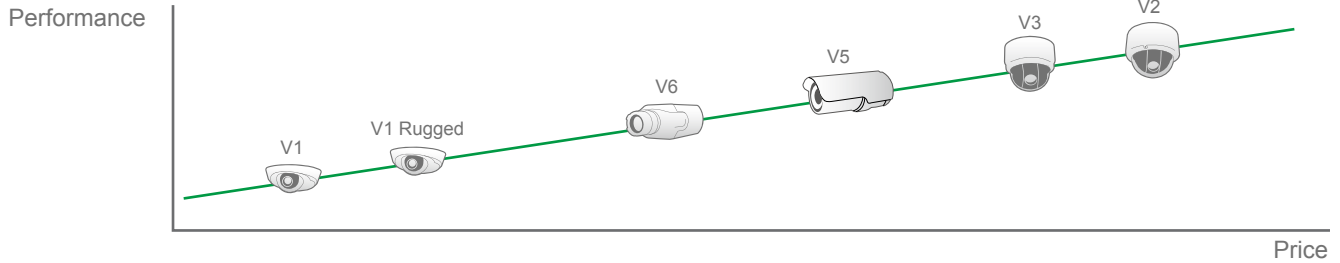
Features

- Progressive Scan CMOS Sensor
- Full HD 1080P / HD 720P real-time at dual stream
- H.264 and MJPEG compression
- NEW** • Multi-language support
- NEW** • Tampering Alarm
- Remote Zoom & Focus (Motorized Lens)*
- Motion Detection
- Privacy Masks
- Day/Night (ICR)
- IR LED module (working distance up to 30m)*
- Micro SD support
- BNC analog output
- Weatherproof (IP66 international)
- Sunshield and Pendent Mount Housing
- Lightweight dome cover (V3 Series)
- **ONVIF** support

Note: Items marked with an asterisk (*) are optional

Megapixel IP Camera

Value Chart



Comparison Chart

Item	V1	V1 Rugged	V6	V5		V3		V2		
CMOS	●	●	●	●	●	●	●	●	●	
Lens	fixed focal	fixed focal	Motorized VF C/CS mount	fixed focal	Manual VF	Motorized VF	Manual VF	Motorized VF	Manual VF	Motorized VF
Day/Night (ICR)	-	-	○	○	○	●	○	●	○	●
Built-in Mic	○	-	-	-	-	-	-	-	-	-
Audio in	●	-	●	●	●	●	●	●	●	●
Audio out	-	-	●	●	●	●	●	●	●	●
Alarm	-	-	●	●	●	●	●	●	●	●
BNC	-	-	○	-	-	-	●	●	●	●
Micro SD	○	○	○	●	●	●	●	●	●	●
Weatherproof (IP66)	-	●	-	●	●	●	-	-	●	●

● Support ○ Optional - Not support

Specification

Item	Full HD Real-time	Full HD
Camera		
Image Sensor	1/2.7" Progressive Scan CMOS	1/2.7" Progressive Scan CMOS
Picture Elements	1920(H) × 1080(V)	1920(H) × 1080(V)
Shutter Speed	1~1/10000 sec.	1~1/10000 sec.
White Balance	Manual / AWB / ATW	
Digital Zoom	Support	
Operation		
Video Compression	H.264/ MJPEG	
Video Streaming	Single Stream: H.264 1080P / MJPEG 1080P Dual Streams, H.264 720P (25/30 fps) + MJPEG 720P (25/30 fps) Dual Streams, H.264 720P (25/30 fps) + H.264 D1 (25/30 fps)	
Resolution	H.264: Full HD 1080P/HD 720P/SXGA/D1/VGA/QVGA/CIF MJPEG: Full HD 1080P/HD 720P/SXGA/D1/VGA/QVGA/CIF	
Frame Rate	H.264: 1080P 25/30 fps MJPEG: 1080P 25/30 fps	H.264: 720P 25/30 fps MJPEG: 720P 25/30 fps
Image Setting	Exposure, White Balance, Backlight Compensation, Brightness, Sharpness, Contrast, Saturation, Hue, Image rotation, Motion detection, Tampering Alarm, Privacy Mask	
Audio	Line Out, Line In/Mic In	
Alarm	Input	5V 10kΩ pull up
	Output	Photo relay output DC/AC 300V
Event Notification	HTTP, FTP, SMTP	
Network		
Interface	RJ-45, 10/100 Mbps Ethernet	
Protocol	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, IEEE 802.1X, ONVIF	
Security	HTTPS, IP Filter, IEEE 802.1X	
Password Levels	User and Administrator	
Internet Browser	Internet Explorer (6.0+), Chrome, FireFox, Safari	
User Account	20	
General		
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)	
	Humidity: 10% to 90%, Non-condensing	
Power Source	DC 12V / AC 24V / PoE	
Power Consumption	4.5W+	
Certificate	CE, FCC, RoHS compliant	

Product specification and availability subject to change without notice. Certain product names mentioned herein may be trade names and / or registered trademarks of their companies.

Product Selection



V6-

Solution A: Full HD CMOS B: Full HD CMOS, real-time	Lens Type 0: CS mount type 1: CS mount type, D/N	Power 2: DC 12V / PoE 3: DC 12V / AC 24V / PoE
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V5-

Solution A: Full HD CMOS B: Full HD CMOS, real-time	Lens type H: 4.0 mm, F1.5, D/N X: Vari-focal 3.0 ~ 9.0 mm, F1.2 Y: Vari-focal 3.0 ~ 9.0 mm, F1.2, D/N	Application 0: None 1: w/ Sunshield 2: w/ IR LED 3: w/ Sunshield & IR LED
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V1-

Solution A: Full HD CMOS B: Full HD CMOS, real-time	Lens Type 5: 4.0 mm, F1.5	Connectors 1M: Micro SD, M12 1R: Micro SD, RJ-45 Cable 30: Mic & Micro SD, RJ-45
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V2-

Solution A: Full HD CMOS B: Full HD CMOS, real-time	Lens Type A: Vari-focal 3.3 ~ 12 mm, F1.4 B: Vari-focal 3.3 ~ 12 mm, F1.4, D/N C: Motorized Vari-focal 3.3 ~ 12mm, F1.4, D/N	IR LED 0: None 1: IR LED	Heater & Fan 0: Indoor B: Outdoor w/ H & F
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*H & F: Heater & Fan



V3-

Solution A: Full HD CMOS B: Full HD CMOS, real-time	Lens Type A: Vari-focal 3.3 ~ 12 mm, F1.4 B: Vari-focal 3.3 ~ 12 mm, F1.4, D/N C: Motorized Vari-focal 3.3 ~ 12 mm, F1.4, D/N	IR LED 0: None 1: IR LED
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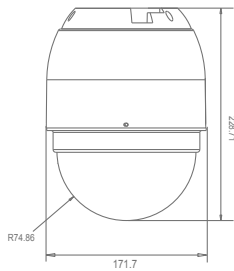
High Speed Dome Camera

network DynaHawk™ 720 / 820 Series



Dimension

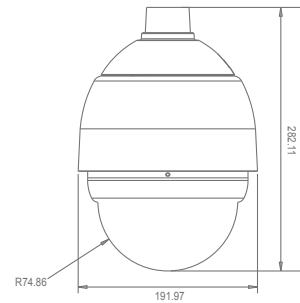
NH720 Full HD Speed Dome IP Camera



Unit: (mm)

Dimension

NH820 Full HD Speed Dome IP Camera



Unit: (mm)

Features

Superior Camera Image Quality

- NEW** • Sony Progressive Scan CMOS Sensor
- NEW** • Full HD 1080P resolution
- NEW** • Dual streams, Full HD real-time + D1 real-time
 - H.264 Main profile and MJPEG compression
- NEW** • Up to 20x optical zoom
 - Electronic Shutter
- NEW** • Wide Dynamic Range
 - Auto White Balance
 - AGC control
 - Backlight Compensation
 - Auto Exposure
 - Image Inverse
 - Removable IR Cut Filter
- NEW** • Digital Noise Reduction

Precise and Accurate Dome Camera Performance

- Preset speed up to 400°/sec.
- Preset resolution of 0.225°
- NEW** • Proportional Pan & Tilt Speed
 - Preset Position / Auto-Pan / Sequence / Cruise
 - Auto-Calibration
 - Digital / Mechanical Image Flip (180°)

Dynamic Dome Camera Applications

- Schedule function
- Up to 16 Privacy Masks
- 4 digital alarm inputs, 2 digital alarm outputs
- Motion Detection
- NEW** • Flexible indoor / outdoor mountings
 - Weatherproof (IP66 international)
- NEW** • High Power over Ethernet (IEEE 802.3at)

Specification

Item	18N1	20N1
Camera		
Image Sensor	1/2.8" Sony Progressive Scan CMOS	
Optical Zoom	18×	20×
Digital Zoom	1× ~ 8× variable	
Focal Length	4.7 ~ 84.6 mm	4.7 ~ 94 mm
Focus Mode	Auto / Manual	
White Balance	Auto / Indoor / Outdoor / ATW	
Iris Control	Auto / Manual	
Electronic Shutter	1/30 ~ 1/10k sec.	
AGC Control	Auto / Manual	
Backlight Compensation	On / Off	
Operation		
Pan Travel	360° endless	
Tilt Travel	-10° ~ 190°	
Manual Speed	0.5° ~ 90°/s	
Presets	256	
Preset Resolution	0.225°	
Preset Speed	5° ~ 400°/s	
Sequence	8	
Auto-Pan	4	
Cruise	8	
Privacy Mask	16	
Proportional Pan & Tilt	On / Off (Pan and tilt speed is proportional to zoom ratio)	
Resume after Power Loss	Yes	
Zone Title	16	
Home Function	Preset, Sequence, Auto-Pan, Cruise	
Auto-Flip	Digital / Mechanical / Off	
Motion Detection	On / Off	
Wide Dynamic Range	On / Off	
Day/Night (ICR)	Auto / Manual	
Image Freeze	On / Off	
Image Inverse	On / Off	
Digital Noise Reduction	2D 3D	On / Off On / Off
Network		
Video Compression	H.264 Main Profile and MJPEG	
Video Streaming	Multiple streams, H.264 + MJPEG / H.264 + H.264	
Video Resolution	1080P / 720P / VGA / D1	
Frame Rate	30 / 25 fps @ 1080P 60 / 50 fps @ 720P	
Audio Compression	G711 / G.726 ADPCM/AAC	
Audio Streaming	Two-way	
Interface	RJ-45, 10/100 Mb Ethernet	
Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, IEEE 802.1X, ONVIF	
Digital Alarm Input	4	
Digital Alarm Output	2	
Alarm Reaction	Preset, Sequence, Auto-Pan, Cruise	
Security	User Account and Password Protection	
Supported Web Browser	Internet Explorer (6.0+), Chrome, Firefox, Safari	
General		
Environment	Indoor / Outdoor	
Operating Temperature	NH720	0 °C ~ 40 °C (32 °F ~ 104 °F)
Temperature	NH820	-40 °C ~ 50 °C (-40 °F ~ 122 °F)
Weatherproof Standard	IP66 international (NH820 series only)	
Dimension	NH720	Φ171.7 × 228.71 mm (Φ6.76 × 9 inches)
	NH820	Φ191.97 × 282.11 mm (Φ7.55 × 11.1 inches), with sunshield
Weight	NH720	1.62 Kg (3.57 lbs)
	NH820	2.32 Kg (5.11 lbs)
Power Source	NH720	PoE+ / AC 24V ± 10%
	NH820	AC 24V ± 10%
Power Consumption	NH720	20 W
	NH820	65 W (with heater)
Regulatory	CE, FCC, RoHS	

Product specification and availability subject to change without notice. Certain product names mentioned herein may be trade names and / or registered trademarks of their companies.

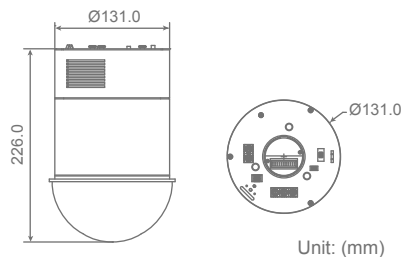
High Speed Dome Camera

DynaHawk™ 701 / 801+ S Series



Dimension

DH701 Integrated High Speed Dome Camera



Features

Superior Camera Image Quality

- 650 TV lines High Resolution
- Minimum illumination 0.01 Lux (B/W)
- Digital Slow Shutter
- Electronic Shutter
- Auto White Balance
- Backlight Compensation
- Auto Exposure
- Image Inverse

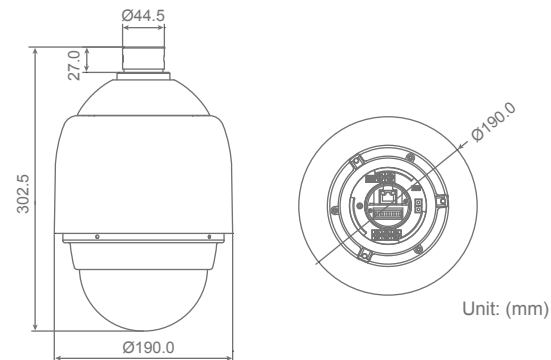
NEW • Removable IR Cut Filter**NEW** • Wide Dynamic Range**NEW** • 2D / 3D Noise Reduction

Optional Network Functions

NEW • H.264 and MJPEG compression**NEW** • D1 Real-time resolution**NEW** • 3D de-interlaced support

Dimension

DH801+ Integrated High Speed Dome Camera



Precise and Accurate Dome Camera Performance

- Preset speed up to 400°/sec.
- Preset resolution of 0.225°
- 360° Endless Pan
- Proportional Pan & Tilt Speed
- Preset Position / Auto-Pan / Sequence / Cruise
- Auto-Calibration
- Digital / Mechanical Image Flip (180°)

Dynamic Dome Camera Applications

NEW • Multi-language OSD

- Schedule function

NEW • Multiple built-in protocols

- 16 Privacy Masks
- 8 alarm inputs, 1 alarm output
- Motion Detection
- Flexible indoor / outdoor mountings
- Compact lightweight design for easy installation
- Weatherproof (IP66 international)

NEW • Integrated Pelco Coaxitron® support**NEW** • Integrated BOSCH Biphas® support

Specification

Item	SB Model	S5 Model	S6 Model
Camera			
Image Sensor		1/4" Sony CCD	
Optical Zoom	18x	30x	36x
Digital Zoom		1x ~ 12x variable	
Effective Pixels	NTSC	480 k	
	PAL	570 k	
Horizontal Resolution		650 TVL	
Scanning System		NTSC / PAL	
Synchronization		Internal / Line Lock	
Video Output		1.0 Vp-p / 75 Ω, BNC	
S/N Ratio		> 50 dB (AGC Off)	
Minimum Illumination		0.1 lux, 0.01 lux (B/W)	
Focal Length	3.4 ~ 61.2 mm	3.4 ~ 102 mm	3.4 ~ 122.4 mm
Focus Mode		Auto / Manual	
White Balance		Auto / Manual	
Iris Control		Auto / Manual	
Electronic Shutter		1/1~1/10k sec.	
AGC Control		Auto / Manual	
Backlight Compensation		On / Off	
Operation			
Built-in Protocol		DSCP, Pelco P, Pelco D, AD422, Philips, Kalatel, VCL, JVC, etc.	
Multi-language OSD	English, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Turkish, S. Chinese, T. Chinese		
Pan Travel		360° endless	
Tilt Travel		-10° ~ 190°	
Manual Speed		0.5° ~ 90°/s	
Presets		256	
Preset Resolution		0.225°	
Preset Speed		5° ~ 400°/s	
Sequence		8	
Auto-Pan		4	
Cruise		8	
Privacy Mask		16	
Proportional Pan & Tilt		On / Off (Pan and tilt speed proportional to zoom ratio)	
Resume after Power Loss		Yes	
Zone Title		16	
Home Function		Preset, Sequence, Auto-Pan, Cruise	
Auto-Flip		Digital / Mechanical / Off	
Digital Slow Shutter		On / Off	
Motion Detection		On / Off	
Wide Dynamic Range		On / Off	
Day/Night (ICR)		On / Off	
Image Freeze		On / Off	
Image Inverse		On / Off	
Noise Reduction	2D	On / Off	
	3D	On / Off	
Alarm Input		8	
Alarm Output		1	
Alarm Reaction		Preset, Sequence, Auto-Pan, Cruise	
Network; optional			
Video Compression		H.264 Main Profile and MJPEG	
Video Stream		Multiple streams, H.264 + H.264 / H.264 + MJPEG	
Video Resolution		D1: NTSC 720 × 480 / PAL 720 × 576; CIF: NTSC 352 × 240 / PAL 352 × 288	
Frame Rate		30 fps @ D1 Resolution	
Audio Compression		G.726 ADPCM / AAC	
Audio Stream		Full-duplex, Half-duplex, Simplex	
Interface		RJ-45, 10/100 Mbps Ethernet	
Protocols		TCP/IP, UDP, HTTP, FTP, SMTP, ARP, ICMP, DHCP, RTP/RTSP	
Alarm	Output	× 4, relay output AC 120V / DC 30V	
	Input	× 1, 5V 4.7kΩ pull up	
Alarm Reaction		Preset, Sequence, Auto-Pan, Cruise	
Security		User Account and Password Protection	
General			
Environment		Indoor / Outdoor	
Controller Interface		RS-485	
Operating Temperature	DH701	0 °C ~ 40 °C (32 °F ~ 104 °F)	
	DH801*	-40 °C ~ 50 °C (-40 °F ~ 122 °F)	
Regulatory		IP66 international (DH801+ series only)	
Dimension	DH701	Ø 131 × 226 mm (Ø 5.2 × 8.9 Inches)	
	DH801*	Ø 172 × 302.5 mm (Ø 6.7 × 11.9 Inches) / Ø 190 × 302.5 mm (Ø 7.5 × 11.9 Inches), with sunshield	
Weight	DH701	1.6 Kg (3.5 lbs)	
	DH801*	2.6 Kg (5.7 lbs)	
Power Source	DH701	DC 12V / AC 24V ± 10%	
	DH801*	AC 24V ± 10%	
Power Consumption	DH701	20 W	
	DH801*	65 W (with heater)	
		CE, FCC, RoHS	

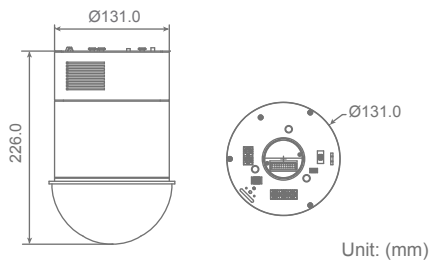
High Speed Dome Camera

DynaHawk™ 701 / 801+ Series



Dimension

DH701 Integrated High Speed Dome Camera



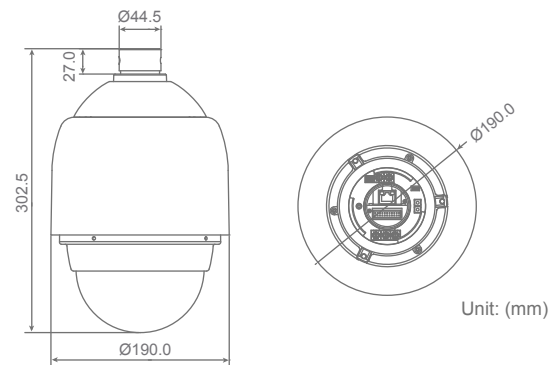
Features

Superior Camera Image Quality

- Minimum illumination 0.01 Lux (B/W)
- Digital Slow Shutter
- Electronic Shutter
- NEW** • Wide Dynamic Range
- Auto White Balance
- Backlight Compensation
- Auto Exposure
- Image Inverse
- NEW** • Removable IR Cut Filter
- NEW** • Digital Noise Reduction

Dimension

DH801+ Integrated High Speed Dome Camera



Precise and Accurate Dome Camera Performance

- Preset speed up to 400°/sec.
- Preset resolution of 0.225°
- Proportional Pan & Tilt Speed
- Preset Position / Auto-Pan / Sequence / Cruise
- Auto-Calibration
- Digital / Mechanical Image Flip (180°)

Dynamic Dome Camera Applications

- NEW** • Multi-language OSD
- Schedule function
- NEW** • Multiple built-in protocols
- 16 Privacy Masks
- 8 alarm inputs, 1 alarm output
- Motion Detection
- Flexible indoor / outdoor mountings
- Compact lightweight design for easy installation
- Weatherproof (IP66 International)
- NEW** • Integrated Pelco Coaxitron® support
- NEW** • Integrated BOSCH Biphas® support

Specification

Item		G Model	M Model	V Model	P Model	T Model
Camera						
Image Sensor		1/4" EXview CCD	1/4" CCD	1/4" EXview CCD	1/4" CCD	1/4" EXview CCD
Progressive Scan		-	Yes	-	Yes	-
Optical Zoom		18×	23×	26×	35×	36×
Digital Zoom		1× ~ 12× variable				
Effective Pixels	NTSC	380 k				
	PAL	440 k				
Horizontal Resolution	NTSC	530 TVL	540 TVL	530 TVL	540 TVL	530 TVL
	PAL	530 TVL	540 TVL	530 TVL	540 TVL	530 TVL
Scanning System		NTSC / PAL				
Synchronization		Internal / Line Lock				
Video Output		1.0 Vpp / 75 ohm, BNC				
S/N Ratio		> 50 dB (AGC Off)				
Minimum Illumination		0.07 lux, 0.01 lux (B/W)	0.1 lux, 0.01 lux (B/W)	0.09 lux, 0.01 lux (B/W)	0.1 lux, 0.01 lux (B/W)	0.1 lux, 0.01 lux (B/W)
Focal Length		4.1 ~ 73.8 mm	3.6 ~ 82.8 mm	3.5 ~ 91 mm	3.4 ~ 119 mm	3.4 ~ 122.4 mm
Focus Mode		Auto / Manual				
White Balance		Auto / Manual				
Iris Control		Auto / Manual				
Electronic Shutter	NTSC	1/1 ~ 1/10k sec.	1/2 ~ 1/30k sec.	1/1 ~ 1/10k sec.	1/1 ~ 1/30k sec.	1/1 ~ 1/10k sec.
	PAL	1/1 ~ 1/10k sec.	1/1.5 ~ 1/30k sec.	1/1 ~ 1/10k sec.	1/1 ~ 1/30k sec.	1/1 ~ 1/10k sec.
AGC Control		Auto / Manual				
Backlight Compensation		On / Off				
Operation						
Built-in Protocol		DSCP, Pelco P, Pelco D, AD422, Philips, Kalatel, VCL, JVC, etc.				
Multi-language OSD		English, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Turkish, S. Chinese, T. Chinese				
Pan Travel		360° endless				
Tilt Travel		-10° ~ 190°				
Manual Speed		0.5° ~ 90°/s				
Presets		256				
Preset Resolution		0.225°				
Preset Speed		5° ~ 400°/s				
Sequence		8				
Auto-Pan		4				
Cruise		8				
Privacy Mask		24	8	24	8	24
Proportional Pan & Tilt		On / Off (Pan and tilt speed is proportional to zoom ratio)				
Resume after Power Loss		Yes				
Zone Title		16				
Home Function		Preset, Sequence, Auto-Pan, Cruise				
Auto-Flip		Digital / Mechanical / Off				
Digital Slow Shutter		On / Off	On / Off	On / Off	On / Off	On / Off
Electronic Image Stabilizer		-	-	-	-	-
Motion Detection		On / Off	On / Off	On / Off	On / Off	On / Off
Wide Dynamic Range		On / Off	On / Off	On / Off	On / Off	On / Off
Day/Night (ICR)		On / Off	On / Off	On / Off	On / Off	On / Off
Image Freeze		On / Off	On / Off	On / Off	On / Off	On / Off
Image Inverse		On / Off	On / Off	On / Off	On / Off	On / Off
Digital Noise Reduction		-	-	-	On / Off	-
Alarm Input		8				
Alarm Output		1				
Alarm Reaction		Preset, Sequence, Auto-Pan, Cruise				
General						
Environment		Indoor / Outdoor				
Controller Interface		RS-485				
Operating Temperature	DH701	0 °C ~ 40 °C (32 °F ~ 104 °F)				
	DH801+	-40 °C ~ 50 °C (-40 °F ~ 122 °F)				
Weatherproof Standard		IP66 international (DH801+ series only)				
Dimension	DH701	Ø 131 × 226 mm (Ø 5.2 × 8.9 inches)				
	DH801+	Ø 172 × 302.5 mm (Ø 6.7 × 11.9 inches) / Ø 190 × 302.5 mm (Ø 7.5 × 11.9 inches), with sunshield				
Weight	DH701	1.6 Kg (3.5 lbs)				
	DH801+	2.6 Kg (5.7 lbs)				
Power Source	DH701	DC 12V / AC 24V ± 10%				
	DH801+	AC 24V ± 10%				
Power Consumption	DH701	20 W				
	DH801+	65 W (with heater)				
Regulatory		CE, FCC, RoHS				

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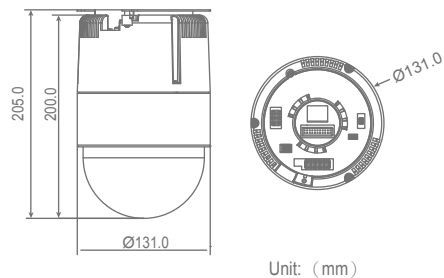
High Speed Dome Camera

DynaHawk™ 510 / 610 Series



Dimension

DH510 Mini Speed Dome Camera



Features

Superior Camera Image Quality

- NEW** • 650 TVL High Resolution
- 12× Optical Zoom
- 12× Digital Zoom
- Digital Slow Shutter
- Backlight Compensation
- Auto Focus
- Auto White Balance
- Auto Gain Control
- Auto Iris Control
- Auto-Calibration
- Removable IR Cut Filter
- Minimum Illumination: 0.1 Lux, 0.01 Lux (B/W)
- NEW** • Wide Dynamic Range
- NEW** • 2D / 3D Noise Reduction

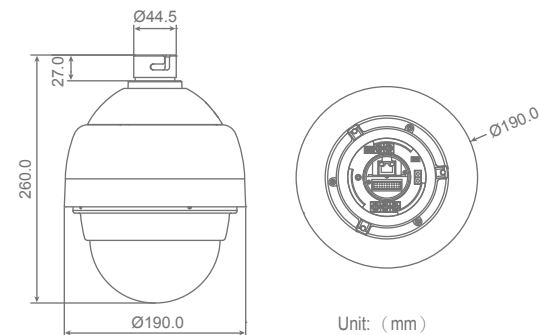
Optional Network Functions

- NEW** • H.264 and MJPEG compression
- NEW** • D1 Real-time resolution
- NEW** • 3D de-interlaced support

Note: Items marked with an asterisk (*) are optional

Dimension

DH610 Mini Speed Dome Camera



Precise and Accurate Dome Camera Performance

- Preset speed up to 400°/sec.
- NEW** • Preset resolution of 0.225°
- 360° Endless Pan
- Proportional Pan & Tilt Speed
- Preset Positions / Auto-Pan / Sequence / Cruise
- Auto-Calibration
- Digital / Mechanical Image Flip (180°)

Dynamic Dome Camera Applications

- Schedule function
- Multiple built-in protocols
- Extraordinary lightweight design for easy installation
- Vandal proof dome cover*
- Weatherproof (IP66 international)
- Flexible indoor / outdoor mountings
- 16 Privacy Masks
- Motion Detection

Specification

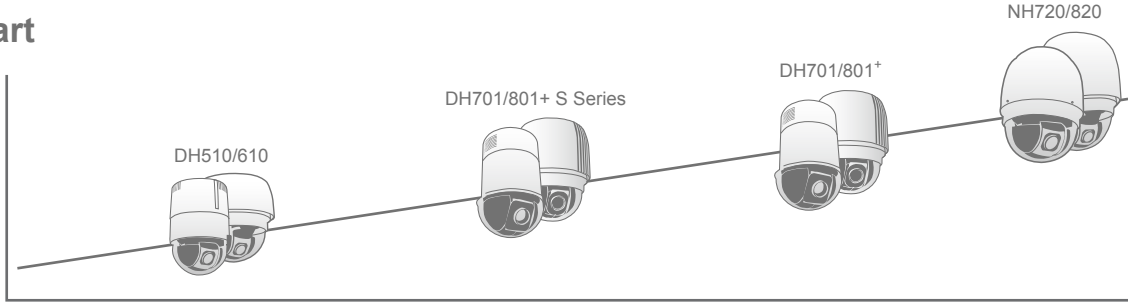
Item	DH510	DH610
Camera		
Image Sensor	1/4" Sony CCD	
Optical Zoom	12×	
Digital Zoom	1× ~ 12× variable	
Effective Pixels	NTSC	480 k
	PAL	570 k
Horizontal Resolution	650 TVL	
Scanning System	NTSC / PAL	
Synchronization	Internal / Line Lock	
Video Output	1.0 Vp-p / 75 Ω, BNC	
Minimum Illumination	0.1 lux; 0.01 lux (B/W)	
Focal Length	3.8 ~ 45.6 mm	
Focus Mode	Auto / Manual	
White Balance	Auto / Manual / Indoor / Outdoor	
Iris Control	Auto / Manual	
Electronic Shutter	1/1 ~ 1/10k sec.	
AGC Control	Auto / Manual	
Backlight Compensation	On / Off	
Operation		
Built-in Protocol	DSCP, Pelco P, Pelco D, AD422, Philips, Kalatel, VCL, JVC, etc.	
Multi-language OSD	English, French, German, Italian, Portuguese, Spanish	
Pan Travel	360° endless	
Tilt Travel	-10° ~ 190°	
Manual Speed	1° ~ 80°/s	
Presets	256	
Preset Resolution	0.1°	
Preset Speed	10° ~ 400°/s	
Sequence	8	
Auto-Pan	4	
Cruise	8	
Privacy Mask	16	
Proportional Pan & Tilt	On / Off (Pan and tilt speed is proportional to zoom ratio)	
Resume after Power Loss	Yes	
Zone Title	16	
Home Function	Preset, Sequence, Auto-Pan, Cruise	
Auto-Flip	Digital / Mechanical / Off	
Digital Slow Shutter	On / Off	
Motion Detection	On / Off	
Wide Dynamic Range	On / Off	
Day/Night (ICR)	On / Off	
Image Freeze	On / Off	
Image Inverse	On / Off	
Noise Reduction	2D	On / Off
	3D	On / Off
Alarm Input	8	
Alarm Output	1	
Alarm Reaction	Preset, Sequence, Auto-Pan, Cruise	
Network; optional		
Video Compression	H.264 Main Profile and MJPEG	
Video Stream	Multiple streams, H.264 + H.264 / H.264 + MJPEG	
Video Resolution	D1: NTSC 720 × 480 / PAL 720 × 576	
	CIF: NTSC 352 × 240 / PAL 352 × 288	
Frame Rate	30 fps @ D1 Resolution	
Audio Compression	G.726 ADPCM/ AAC	
Audio Stream	Full-duplex, Half-duplex, Simplex	
Interface	RJ-45, 10/100 Mbps Ethernet	
Protocols	TCP/IP, UDP, HTTP, FTP, SMTP, ARP, ICMP, DHCP, RTP/RTSP	
Alarm	Output	× 4, relay output AC 120V / DC 30V
	Input	× 1, 5V 4.7kΩ pull up
Alarm Reaction	Preset, Sequence, Auto-Pan, Cruise	
Security	User Account and Password Protection	
General		
Environment	Indoor	Outdoor
Controller Interface	RS-485	
Operating Temperature	0 °C ~ 40 °C (32 °F ~ 104 °F)	-30 °C ~ 45 °C (-22 °F ~ 113 °F)
Weatherproof Standard	IP66 international	
Dimension	Ø 131 × 200 mm (Ø 5.2 × 7.8 inches)	
	Ø 190 × 260 mm (Ø 7.5 × 10.2 inches), with sunshield	
Weight	1.2 kg (2.6 lbs)	2.1 kg (4.6 lbs)
Power Source	DC 12V / AC 24V±10%	AC 24V ± 10%
Power Consumption	18 W	52 W (with heater)
Regulatory	CE, FCC, RoHS	

Product specification and availability subject to change without notice. Certain product names mentioned herein may be trade names and / or registered trademarks of their companies.

High Speed Dome Camera

Value Chart

Performance



Price

Indoor Model Comparison Chart

Item	DH701									DH510	NH720	
	T	P	V	M	G	S6	S5	SB		18N1	20N1	
Camera												
Optical Zoom	36x	35x	26x	23x	18x	36x	30x	18x	12x	18x	20x	
Digital Zoom	12x	12x	12x	12x	12x	12x	12x	12x	12x	8x	8x	
Resolution	530 TVL	540 TVL	530 TVL	540 TVL	530 TVL	650 TVL	650 TVL	650 TVL	650 TVL	1080P	1080P	
Day/Night (ICR)	•	•	•	•	•	•	•	•	•	•	•	
Wide Dynamic Range	•	•	•	•	•	•	•	•	•	•	•	
Motion Detection	•	•	•	•	•	•	•	•	•	•	•	
Digital Image Flip	•	•	•	•	•	•	•	•	•	•	•	
2D/3D Noise Reduction	-	•	-	•	-	•	•	•	•	•	•	
Electronic Image Stabilizer	-	•	-	-	-	-	-	-	-	-	-	
Operation												
Endless Pan Rotation	•	•	•	•	•	•	•	•	•	•	•	
Preset Positions	256	256	256	256	256	256	256	256	256	256	256	
Sequence Lines	8	8	8	8	8	8	8	8	8	8	8	
Auto-Pan	4	4	4	4	4	4	4	4	4	4	4	
Cruise	8	8	8	8	8	8	8	8	8	8	8	
Privacy Mask	24	8	24	8	24	16	16	16	16	16	16	
Home Function	•	•	•	•	•	•	•	•	•	•	•	
Multi-language OSD	•	•	•	•	•	•	•	•	•	•	•	
Multiple Protocols	•	•	•	•	•	•	•	•	•	•	•	
Resume after Power Loss	•	•	•	•	•	•	•	•	•	•	•	
Proportional Pan & Tilt	•	•	•	•	•	•	•	•	•	•	•	
High Power over Ethernet	-	-	-	-	-	-	-	-	-	•	•	

• Support ◦ Option - Not Support

Outdoor Model Comparison Chart

Item	DH801+									DH610	NH820	
	T	P	V	M	G	S6	S5	SB		18N1	20N1	
Camera												
Optical Zoom	36x	35x	26x	23x	18x	36x	30x	18x	12x	18x	20x	
Digital Zoom	12x	12x	12x	12x	12x	12x	12x	12x	12x	8x	8x	
Resolution	530 TVL	540 TVL	530 TVL	540 TVL	530 TVL	650 TVL	650 TVL	650 TVL	540 TVL / 650 TVL	1080P	1080P	
Day/Night (ICR)	•	•	•	•	•	•	•	•	•	•	•	
Wide Dynamic Range	•	•	•	•	•	•	•	•	•	•	•	
Motion Detection	•	•	•	•	•	•	•	•	•	•	•	
Digital Image Flip	•	•	•	•	•	•	•	•	•	•	•	
2D/3D Noise Reduction	-	•	-	•	-	•	•	•	•	•	•	
Electronic Image Stabilizer	-	•	-	-	-	-	-	◦	-	-	-	
Operation												
Endless Pan Rotation	•	•	•	•	•	•	•	•	•	•	•	
Preset Positions	256	256	256	256	256	256	256	256	256	256	256	
Sequence Lines	8	8	8	8	8	8	8	8	8	8	8	
Auto-Pan	4	4	4	4	4	4	4	4	4	4	4	
Cruise	8	8	8	8	8	8	8	8	8	8	8	
Privacy Mask	24	8	24	8	24	16	16	16	16	16	16	
Home Function	•	•	•	•	•	•	•	•	•	•	•	
Multi-language OSD	•	•	•	•	•	•	•	•	•	•	•	
Multiple Protocols	•	•	•	•	•	•	•	•	•	•	•	
Resume after Power Loss	•	•	•	•	•	•	•	•	•	•	•	
Proportional Pan & Tilt	•	•	•	•	•	•	•	•	•	•	•	
Outdoor Dome Camera												
Vandal Proof Dome Cover	◦	◦	◦	◦	◦	◦	◦	◦	◦	◦	◦	
Built-in Heater	•	•	•	•	•	•	•	•	•	•	•	
Weather Resistant Housing (IP66)	•	•	•	•	•	•	•	•	•	•	•	
Sunshield Housing	◦	◦	◦	◦	◦	◦	◦	◦	◦	◦	◦	

• Support ◦ Option - Not Support

Product Selection



NH720 -
 NH820 -

Camera 18N1: Full HD real-time + D1 real-time, 18x, ICR 20N1: Full HD real-time + D1 real-time, 20x, ICR	Cover Color T: Transparent S: Smoke V: Vandal Proof	Application 1: Indoor, w/o H&F 2: Outdoor, w/ H&F 3: Outdoor, w/o H, w/ F	Power 4: PoE+ / AC 24V
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* NH720, NH820 are both with network interface
 **ICR, IR Cut Filter Removable, enables Day / Night function
 *** All models support WDR function



DH701 -S
 DH801⁺ -S

Interface 0: Analog E: Ethernet X: Coaxial B: Biphase	Camera B: 18x, ICR, 650 TVL 5: 30x, ICR, 650 TVL 6: 36x, ICR, 650 TVL	Motor F: Standard	Video System N: NTSC P: PAL	Body Color W: White	Cover Color T: Transparent V: Vandal Proof S: Smoke	Sunshield 0: w/o 1: w	Power 1: DC 12V 2: AC 24V
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*ICR, IR Cut Filter Removable, enables Day / Night function
 ** All models support WDR function



DH701 -
 DH801⁺ -

Interface 0: Analog E: Ethernet X: Coaxial B: Biphase	Camera G: 18x, ICR M: 23x, ICR V: 26x, ICR P: 35x, ICR T: 36x, ICR	Motor F: Standard	Video System N: NTSC P: PAL	Body Color W: White	Cover Color T: Transparent S: Smoke V: Vandal Proof	Sunshield 0: w/o 1: w	Power 1: DC 12V 2: AC 24V
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*ICR, IR Cut Filter Removable, enables Day / Night function



DH510 -
 DH610 -

Interface 0: Analog E: Ethernet	Camera D: 12x, ICR	Sensor 1: 650 TVL	Motor A: Standard	Video System N: NTSC P: PAL	Body 1: Standard (DH510) 2: Classic (DH510) A: w/o Sunshield (DH610) B: w/ Sunshield (DH610)	Cover Color T: Transparent V: Vandal Proof S: Smoke	Power 1: DC 12V 2: AC 24V
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*ICR, IR Cut Filter Removable, enables Day / Night function
 ** All models support WDR function

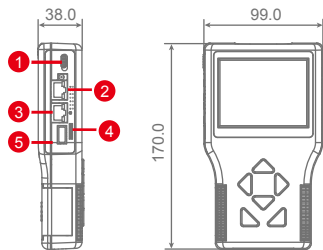
Application

DynaTester™ DT-1 Series

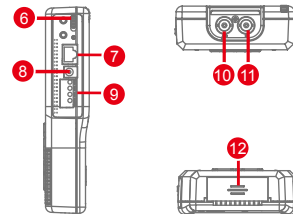


IP Camera Tester

Dimension



- ① PoE Switch Bypass / Power Bank
- ② LAN / PoE Out
- ③ LAN / PoE In
- ④ Micro SD
- ⑤ USB



- ⑥ Power On /Off
- ⑦ CAT5
- ⑧ DC-12V
- ⑨ RS-485
- ⑩ AV In
- ⑪ AV Out
- ⑫ Battery

Unit: (mm)

Features

- NEW** • 3.5" with 320 × 240 CIF resolution
- 10 / 100Mbps Ethernet with RJ-45 connector
- NEW** • PSE function support (IEEE 802.3af standard)
- PTZ control / command parse via Ethernet and RS-485 interface
- Built-in touch panel / keypad
- High capacity Li-Ion battery
- UTP cable test
- NTSC/PAL video in and out / Audio in / Speaker out
- Major IP cameras and protocols support

Specification

Item	DT-1
Color LCD Field Display	3.5", 320 × 240
AV	
Video Input	BNC × 1
Video Output format	BNC × 1
Video Output Signal	Video Bypass & Color Patterns × 8
PTZ Camera	
PTZ Control	RS-485
RS-485 Ports	R+, R-, T+, T-
PTZ Camera Setting	Pan, Tilt, Zoom, Manual Focus, Auto Focus
Support Protocols	DSCP, Pelco D, Pelco P, AD422, Panasonic_C, Panasonic_N, JVC, Fastrax2
IP Camera	
LAN In	10/100 Mbps, DC 48V In / Power Bank In
LAN Out	10/100 Mbps, 802.3af standard
IP Camera Setting	IP Address Setting, Image Setting
Support Brands	DynaColor, ACTi, Arecont Vision, Axis, D-Link, DVTel, GE, IQinVision, Level One, Optelecom-NKF, ONVIF, Panasonic, Planet, Sanyo, Sony, Vivotek
CAT-5	
CAT-5 Port	1
Operation	
Weight with Batteries	450 g
Battery Type	2 × 3.7 V Li-Ion, 2000mAh
Charge Cycle @ 80% capacity	> 300
Charging Time	3.5 Hrs
Operating Time	3 Hrs
Networking	
IP Setting	DHCP, Static IP
Size	
Dimension (W × H × L)	99 × 38 × 170 mm
General	
Electronic	Input Voltage DC 12V, 3A
	Signal Format NTSC / PAL
Video	Video Level 1 Vpp, 140 IRE
PTZ Control	Data Communication RS-485
IP Camera	Connection RJ-45
CAT-5 Cable Test	Detects Straight/Cross Cables, Open, Short, Miswire
USB	Type USB 2.0
SD Card	Type SDHC supported
Audio	Input Line-in
	Output Built-in Speaker, Phone Jack Ø3.5
PoE	Bypass / Power Bank Device PoE LAN In (802.3af standard DC 48V in)

Product specification and availability subject to change without notice. Certain product names mentioned herein may be trade names and / or registered trademarks of their companies.

IP Camera Support List

Brands	Support Models
ACTi	ACD-2100, SCD-2200, ACM-4200, AEK-1001B, SED-2120, SED-2120B, ACD-2200
Arecont Vision	AV1000 series, AV5000 series, AV 8000 series
AXIS	205, 206, 207, 210, 211, 221, 231D, 232D, Q1755, P1311
D-Link	DCS-6815, DCS-6817, DCS-6818, DCS-6615
DVTel	CF-3111, CM-3111, CM-4021
DynaColor	NH060, NH070, NH101, NH210, NH061, NH221, NH062, NH102, V1, V2, V5, V6, VS201,
Divva Protocol	NH071, DH510e, DH610e, DH701e, DH811+e
GE	TVC-MP1B-S, TVC-MP2B-S, TVD-MP1D-S, TVD-MP2D-S/E
IQinVision	IQ752, IQ511
Level One	FCS-1131, FCS-1141, FCS-3071, FCS3081, FCS-5051
Optelecom-NKF	Siquira BC series, Siquira FD series
ONVIF	ONVIF conformance device (compatible with ONVIF Conformance Test v1.01.1.26)
Panasonic	DG-NP304
Planet	ICA-230, ICA-312, IVS-110, ICA-151, ICA-750, ICA-150W, ICA-M220, ICA-107W, ICA-700, P400, ICA-HM131, ICA-HM126
Sanyo	VCC-HD4000, VA-20LAN, VA-50LAN, VA-51LAN, VA-80LAN, VA-82LAN
Sony	SNC-CM120, SNC-CS20, SNC-DM110, SNC-DS10, SNC-DS60, SNC-DF85P, SNC-RX570P, SNC-DF40N/P, SNC-RZ25N/P
VivoTek	PT7135, IP7137(7000 series), IP 8161(8000 series)

Application

DynaGuard™ iCMS



Central Management Server

Features

- PC-based recording and monitoring software
- Managed up to 32 channels
- Support DG-VSS
- Instant / scheduled recording
- Event playback and alert notification
- Dual Streams:
Main Stream for recording, Sub Stream for previewing
- Support SSL SMTP server for email notification
- Google Map in E-Map management
- Digital pan, tilt and zoom
- 2-way audio
- IP speed dome control
- Selectable GUI skin
- Multiple language support

Specification

Item	DynaGuard™ iCMS
Video Format	
Video Inputs	Managed up to 32CH
Video Compression	H.264 / MJPEG / MPEG-4
Video Resolution	CIF to 1080P
Supported Devices	
IP Camera	NH / V / W Series, DH Series
Recording	
Instant Recording	Manually start / stop recording
Scheduled Recording	Scheduled time frame for recording
Audio	
Recording w/ audio	Support instant recording w/ audio
Live w/ audio	Support live display w/ audio
Two-way audio	Bidirectional audio transmission
Monitoring	
Live Monitoring	Different viewing modes / Full screen / Sequence
Remote Playback	Playback recorded videos remotely
Local Playback	Playback recorded videos on PC
Snapshot	Still image
Dome Camera Control	Multiple dome camera control protocols
Image Adjustment	Brightness, Saturation, Hue, Contrast
Streaming	
Dual Streams	Main Stream: Record, Sub Stream: Preview
Event	
Playback	Select and playback events from the event list
Remote Archiving	Select and archive events from the event list
Search	All events will be listed by time
Notification	Event full screen / Alert notification / SSL SMTP Email notification
System Suggestion	
Operation System	Windows 7 Professional
CPU	Intel® Core™ i7-2600 (8M Cache, 3.4 GHz)
Memory	DDR3 4G
Video Card	GeForce GTS450 1GB PCI-E 16X
Ethernet	Gigabit LAN

Product specification and availability subject to change without notice. Certain product names mentioned herein may be trade names and / or registered trademarks of their companies.

DynaGuard™ VSS



Features

- PC-based recording software
- Managed up to 16 channels
- Instant / scheduled / event recording
- Dual Streams:
Main Stream for recording, Sub Stream for CMS previewing
- Support Enterprise / Franchise stores system architecture
- Smart configuration
- IP filter
- HDD availability display
- User management / lock function
- Support DDNS
- Multiple language support

Specification

Item	DynaGuard™ VSS
Video Format	
Video Inputs	Managed up to 16CH
Video Compression	H.264 / MJPEG / MPEG-4
Video Resolution	CIF to 1080P
Supported Devices	
IP Camera	NH / V / W series, DH Series
Recording	
Instant Recording	Manually start / stop recording
Scheduled Recording	Scheduled time frame for recording
Audio	
Recording w/ audio	Support instant recording w/ audio
Streaming	
Dual Streaming	Main Stream: Record, Sub Stream: Preview
System Suggestion	
Operation System	Windows 7 Professional
CPU	Intel® Core™ i5-2500K (6M Cache, 3.3 GHz)
Memory	DDR3 4G
Ethernet	Gigabit LAN

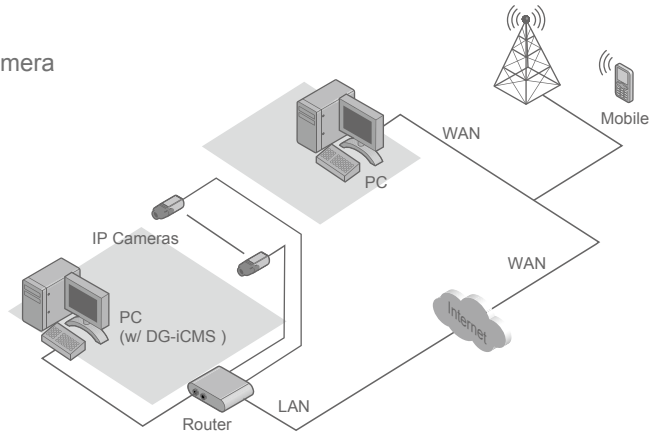
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Application

System Diagram

Products:

- NH, V, W Series, IP Camera
- DG-iCMS



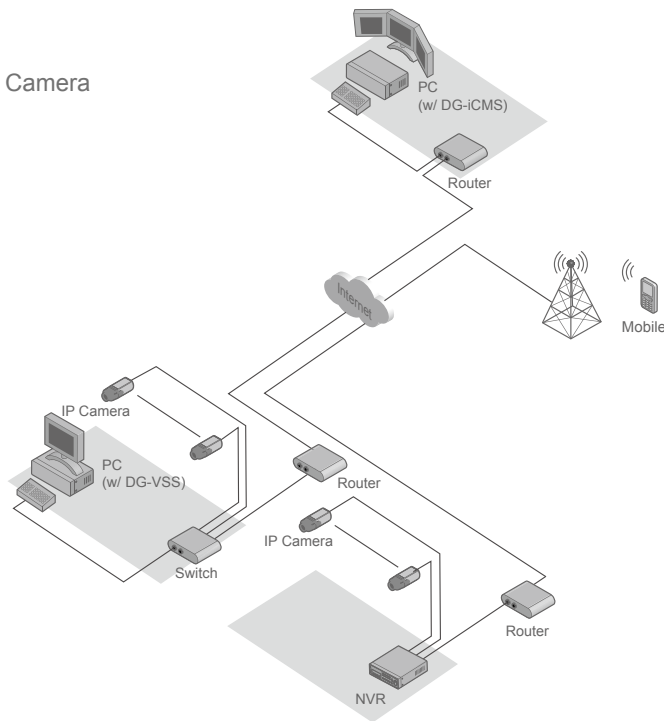
Network : _____

SMB / Single Store

System Diagram

Products:

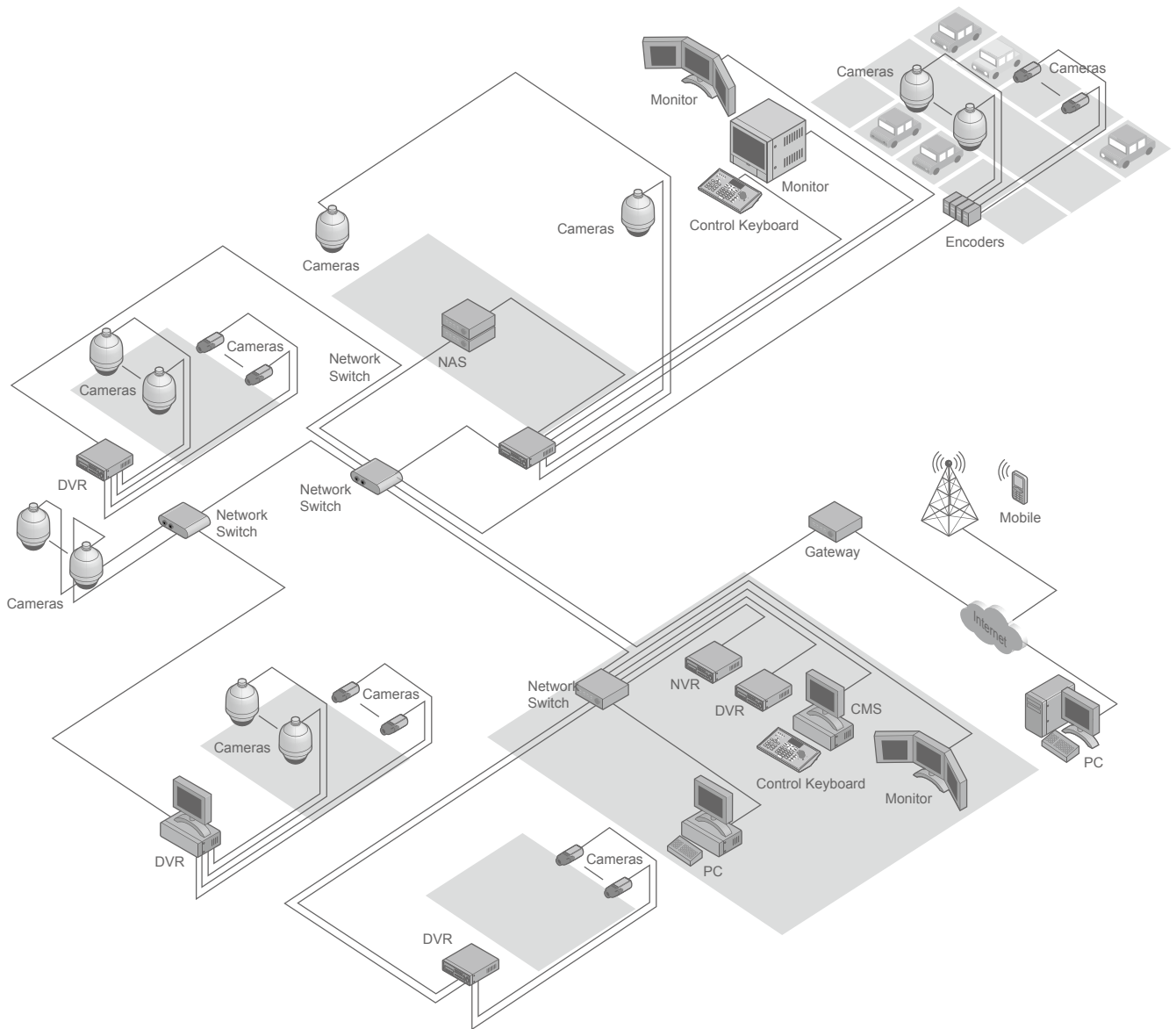
- NH, V, W Series, IP Camera
- IP PTZ
- DG-VSS, NVR
- DG-iCMS



Network : _____

Enterprise / Franchise Stores

System Diagram





■ H.264 Hybrid DVR

■ Megapixel IP Camera

■ High Speed Dome Camera

■ Application

■ System Diagram



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