

Hitron Visualized Total Security Solution

Hitron insight of video surveillance industry has come out as visualized total security solution.
Our spirit has kept forwarding the contribution to make the safe world video surveillance in 4IR era.



ENCODER DECODER



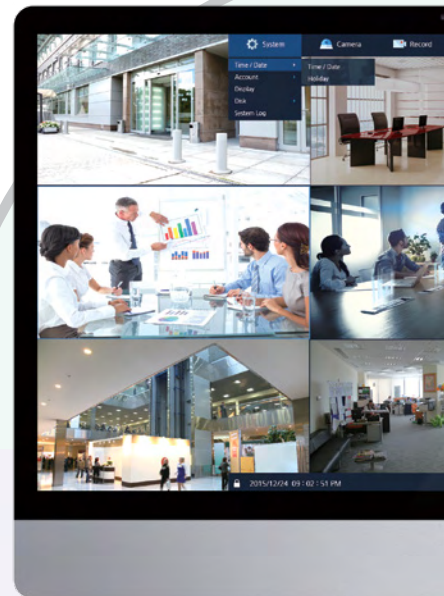
DIGITAL VIDEO RECORDER



ANALOG CAMERA [AHD / TVI / CVBS]



Virtual



**TITANIUM
2.0**



**TITANIUM
MOBILE**



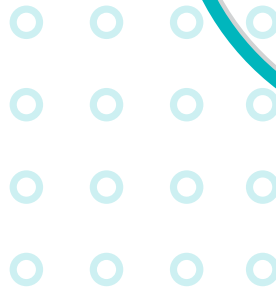
**NETWORK VIDEO
RECORDER**



**IP CAMERA
[H.265 / H.264]**



Matrix



Network Camera

New Hitron H.265 IP cameras provide Hi-Stream, Intelligent video contents analysis with crystal clear image for end to end vertical market. Compliance for Onvif standard with sophisticated functions increase the flexibility with Titanium 2.0 & Hitron recording platforms.

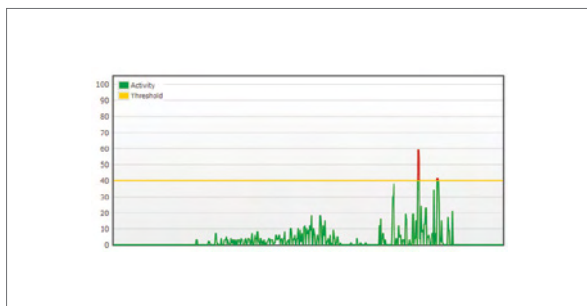
Third party supports through SDK, API are well experienced with 31 years insight.



Key Feature

⚡ Motion Histogram

In order to avoid False Alarm and to get clear Day & Night Hysteresis, enable Visualized Motion Histogram.



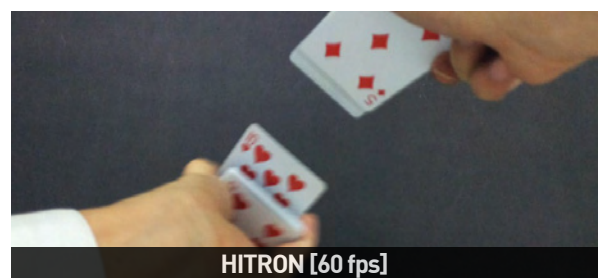
⚡ Event Boost

In order to get Effective Video Quality and Save the Storage, User Can Select the Stream, Resolution and Bitrate according to Event Input.



⚡ 60 Frame Per Second Frame Rate

HITRON Cameras encoding technology, the cameras have an ultra fast frame rate of 60fps at 2 megapixel 1080p resolution, this results in latency free clear images. It is possible to utilize this frame rate in multiple ways. For example, using 60fps at 2 megapixel 1080p resolution, can be particularly beneficial when viewing moving objects to ensure that any edges are kept sharp and clear. By dividing the frame rate between the NVR and PC monitoring, users can both record and monitor the scene at real-time.

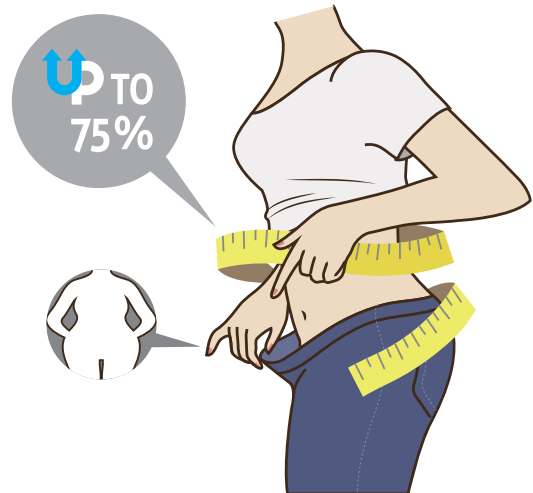


Hi-stream

Hi-stream combines Static Region Of Interest [SROI], Dynamic Region Of Interest [DROI] and Dynamic Frame Rate Control [DFRC] technologies, which enable the cameras to optimize quality for desired regions and adjust encoding automatically to maximize bandwidth usage efficiency and lower storage requirements while maintaining high image quality.

Hi-stream

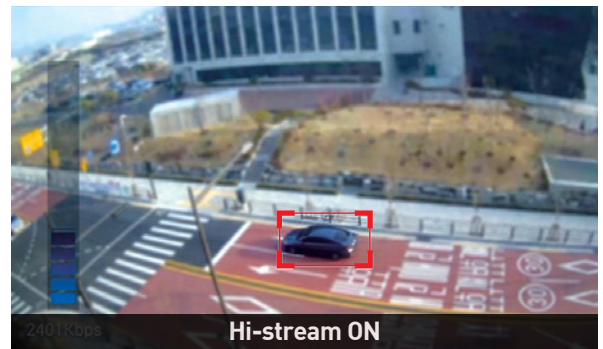
High Video Quality,
Intelligently Save Bandwidth and Storage



Static Region Of Interest [SROI]



Dynamic Region Of Interest [DROI] & Dynamic Frame Rate Control [DFRC]



Intelligent Video Analytics

IntelliVision became partnership with Hitron and now we provide Intelligent Video Analytics, Video Contents Analysis for retail business, advanced security market, customer metrics which will be seamlessly integrated with various platform.

 IntelliVision



Network & Digital Video Recorder

New Hitron Recorders which are fully based on Customer eXperience that makes harmonized User Interface for Business Intelligence. We create the variety applications from small business up to project based volume business through Virtual Matrix & WARP solutions which make you TCO efficiency as well as scalable target vertical solutions.



Korean Intellectual
Property Office

Recorders

Hybrid Video Format Support

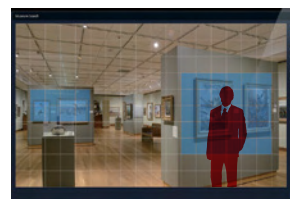
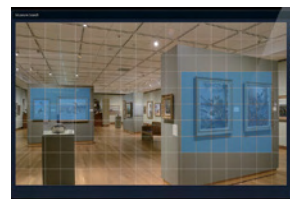
Hybrid Digital Video Recorders enable you to record data and video from standard Analog Cameras, HD Analog, HD TVI as well as IP Network Camera which allow you to have flexibility of combining HD Analog and IP Network Camera depends on the sites. Also, it will bring you to record, view live display, playback and backup at the same time even more with WARP solution.

IP [H.265 / H.264]
HD Analog
HD TVI
CVBS



Smart Search

Smart Search enable you to review from the motion events in specific zones of your video stream. Select the areas that interest you and Smart Search plays your recording from the time when your camera detects motion in those areas and it will deliver designated area motion search as quickly as possible for specific selected time.



WARP

All of Hitron Recorders which are Network Video Recorders and Hybrid Digital Video Recorders allow you to control individual devices each other through WARP function which is based on 1 to 1 device remote access to have full setup control via network. This outstanding and Smart Remote Maintenance feature brings you the benefit of managing your time and optimizing your cost effectively.





Virtual Matrix

Video Management Solution

- ▶ Simultaneous multiple IP/HD analog/Analog display and control
- ▶ 4K Main output and Full HD controllable sub-monitor output
- ▶ Compact Video wall feature & full control of connected devices
- ▶ Redundancy recording with smart search
- ▶ Multiple video stream control
- ▶ Alarm I/O support

Smart functionality through WARP

- ▶ Loading the same display & control of remote recorder
- ▶ Full control capability of connected devices [Setup, Live monitoring, Search, Playback, Controls]
- ▶ Smart remote maintenance

Total Cost of Ownership

- ▶ Optimized Stand-alone system in front-end
- ▶ Easy to control with unified UI/UX
- ▶ Full control & recording without license



Titanium 2.0

Titanium 2.0 is New Central Management Software[CMS software] for Hitron surveillance Recorders and IP cameras. Titanium 2.0 allows you to integrate Hitron recorders and IP cameras with desired monitoring solutions. Video monitoring with smart health management brings you the advanced user experience. Dynamic UI/UX and intelligent multi-stream control enlarge you the comfortable solutions.

❖ CX based Smart Software Platform



- ▶ Simultaneous 128CH Live, Search, Playback, control in cross platform
- ▶ Intelligent Multi-Stream display & Bandwidth control
- ▶ Intuitive & Dynamic UI/UX
- ▶ Smart discovery connection, Screen merge, Rotation, ROI live
- ▶ Smart Health Monitoring : Status, Health, Event Map, Network Status



Titanium Mobile

Titanium Mobile makes you access the whole Hitron video devices anywhere. It allows live monitoring, playback, control, set-up like portable CMS. Supporting Android and iOS platform carries user-friendly interface everywhere.

❖ Mobile Application



- ▶ Intuitive menu control [Drawer / List / ICON]
- ▶ 32CH Multiple Display in Live & Playback
- ▶ PTZ / Digital Zoom / Audio control
- ▶ PTZ virtual joystick control
- ▶ Event Push Alarm
- ▶ Time / Event Search



CONTENTS

Network Camera

Box / Housing / Bullet Camera

NBX-2201	p.02
NBX-6293	p.03
NZX-2203D1	p.04
NHX-2200D1	p.05
NHX-630A1R	p.06
NUH-52J1	p.07
NUH-1231	p.08
NUH-12J2	p.09
NUH-64J1	p.10
NUH-2431	p.11
NUH-24J2	p.12
NUX-6213R	p.13
NUX-6277R	p.14
NUX-2245D	p.15
NAX-2200D1	p.16
NUX-6313R	p.17
NUX-6377R	p.18
NUX-6587R	p.19
NUA-1811	p.20

Plastic Dome Camera

NDH-52J1	p.22
NDH-64J1	p.23
NDX-6217R	p.24
NDX-6277R	p.25
NDX-2221/2231	p.26
NDX-63E2/63E2A	p.27
NDX-6317R	p.28
NDX-6377R	p.29
NDX-6587R	p.30

VP Dome / Turret Camera

NVH-52J1	p.32
NVH-64J1	p.33
NVX-6217R	p.34
NVX-6277R	p.35
NVX-2223R/2233R	p.36
NVX-6317R	p.37
NVX-6377R	p.38
NVX-6587R	p.39
NTH-1231	p.40
NTH-12J2	p.41
NTH-2431	p.42
NTH-24J2	p.43
NVX-2295R	p.44
NVX-6375R	p.45
NVX-6585R	p.46

Speed Dome Camera

NMX-22030D3	p.48
NMX-22032D3A	p.49
NFX-22033D1	p.50
NFX-22033D1A	p.51
NFX-22153D1	p.52
NFX-22153H3	p.53
NFX-22154H3L	p.54

Specialty Camera

NEX-3285	p.56
NEX-3295	p.57
NHX-3281	p.58
NAX-2210D1	p.59
NEX-2202R	p.60
NEX-6302R	p.61
NDX-6536	p.62

HD Analog Camera

Box / Bullet / Dome Camera

HDB-N35NN(P)B8A(T)	p.64
TZT-2203D1	p.65
HDHI-N31NN(P)E1H8A(T)	p.66
HDUI-N31NN(P)F3U1A(T)	p.67
HDUI-N31NN(P)V2U2A(T)	p.68
HDUI-N31NN(P)V2U5A(T)	p.69
HDUI-N31NN(P)E1U5A(T)	p.70
HDUI-E35NN(P)E1U5A(T)	p.71
HDGI-N31NN(P)F3A32A(T)	p.72
HDGI-N31NN(P)V2A32A(T)	p.73
HDGI-N31NN(P)E1A0A(T)	p.74
HDGI-N31NN(P)F3S22A(T)	p.75
HDGI-N31NN(P)V2S22A(T)	p.76
HDGI-N31NN(P)E1S0A(T)	p.77
HDGI-E35NN(P)E1S0A(T)	p.78
TXN-320H1	p.79

Speed Dome Camera

TMT-22032D3	p.81
TMT-22032D3A	p.82
TFT-22033D1	p.83
TFT-22033D1A	p.84
TFT-22053D1H	p.85

Recorder

NVR

HNR-4530	p.87
HNR-8540 / 16560	p.88
HNR-16620 / 32620	p.89
HNR-32600	p.90
HNR-32600S / 64600S	p.91

Hybrid DVR

HVR-4781 / 8781 / 16781	p.92
HVR-8780 / 16780	p.93
HVR-16790	p.94

Virtual Matrix(VM²)

HVM-64600	p.96
HVM-80600S	p.97

Accessories

Encoder

HAE-001	p.98
HAE-012	p.99

Storage

HAS-08IR / 16IR	p.100
-----------------	-------

Switch

HAP-SW04F / SW08F	p.101
HAP-SW24F, HUK5000	p.102

ETC

HAQ-400	p.103
HAP-EPCIPC2 / EPCSV2 / ECIPC2 / ECSV2	p.104
Zoom Lens	p.105
HCH808 / HDH304	p.106
Box, Bullet Accessories	p.107
Dome Accessories	p.108
Dome, PTZ Accessories	p.109
PTZ,ETC Accessories	p.110
Accessory Configuration Tree	p.111~114

NETWORK BOX, HOUSING, BULLET CAMERA

Model	Type	Image	Key SPEC							
			Codec	Sensor	Lens	Min. Illumination	AE	IR (Distance)	Ingress Protection	Page
NBX-2201	2M Box		H.264	1/2.8" CMOS	C/CS Mount	0.01Lux	TWDR	-	-	p.02
NBX-6293	2M Box		H.264	1/2.9" CMOS	C/CS Mount	0.01Lux	DWDR	-	-	p.03
NZX-2203D1	2M Box		H.264	1/2.8" CMOS	4.3~129mm AF	0.013Lux	TWDR	-	-	p.04
NHX-2200D1	2M Housing		H.264	1/2.8" CMOS	5.1~51mm AF	0Lux	TWDR	10EA (100m)	IP66	p.05
NHX-630A1R	3M Housing		H.264	1/2.8" CMOS	2.8~12mm Motorized	0Lux	DWDR	4EA (60m)	IP66	p.06
NUH-52J1	2M Bullet		H.265 H.264	1/2.8" CMOS	2.8~12mm Motorized	0Lux	TWDR	36EA (30m)	IP66	p.07
NUH-1231	2M Bullet		H.265 H.264	1/2.9" CMOS	3.6mm Fixed	0Lux	DWDR	1EA (30m)	IP66	p.08
NUH-12J2	2M Bullet		H.265 H.264	1/2.9" CMOS	2.8~12mm Motorized	0Lux	DWDR	24EA (30m)	IP66	p.09
NUH-64J1	4M Bullet		H.265 H.264	1/3" CMOS	2.8~12mm Motorized	0Lux	TWDR	36EA (30m)	IP66	p.10
NUH-2431	4M Bullet		H.265 H.264	1/3" CMOS	3.6mm Fixed	0Lux	DWDR	1EA (30m)	IP66	p.11
NUH-24J2	4M Bullet		H.265 H.264	1/3" CMOS	2.8~12mm Motorized	0Lux	DWDR	24EA (30m)	IP66	p.12
NUX-6213R	2M Bullet		H.264	1/2.9" CMOS	3.7mm Fixed	0Lux	DWDR	24EA (25m)	IP67	p.13
NUX-6277R	2M Bullet		H.264	1/2.9" CMOS	2.8~12mm Motorized	0Lux	DWDR	34EA (30m)	IP66	p.14
NUX-2245D	2M Bullet		H.264	1/2.8" CMOS	2.8~11mm Motorized	0Lux	TWDR	32EA (25m)	IP66	p.15
NAX-2200D1	2M Bullet		H.264	1/2.8" CMOS	5.1 ~ 51mm AF	0Lux	TWDR	32EA (25m)	IP66	p.16
NUX-6313R	3M Bullet		H.264	1/2.8" CMOS	3.7mm Fixed	0Lux	DWDR	24EA (25m)	IP67	p.17
NUX-6377R	3M Bullet		H.264	1/2.9" CMOS	2.8~12mm Motorized	0Lux	DWDR	34EA (30m)	IP66	p.18
NUX-6587R	5M Bullet		H.264	1/1.8" CMOS	3.6~10mm Motorized	0Lux	DWDR	34EA (30m)	IP66	p.19
NUA-1811	8M Bullet		H.264	1/2.3" CMOS	5.0mm Fixed	0Lux	DWDR	34EA (20m)	IP66	p.20



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AiHM Event
- Event Buffering

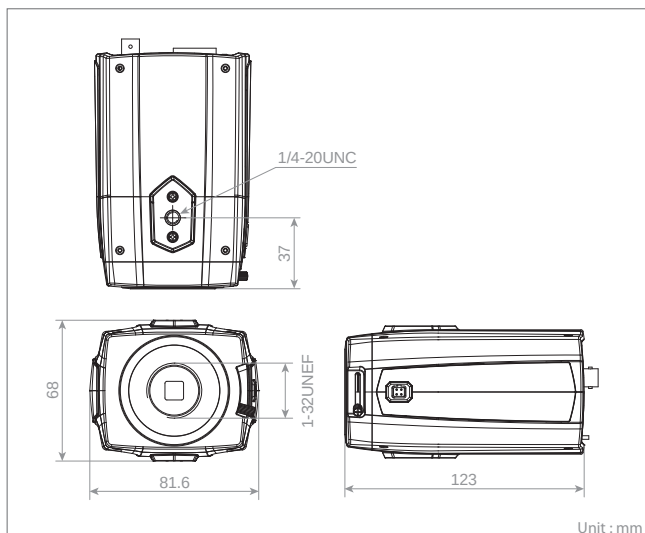
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HCH Housing Series
- HCS Bracket Series

Dimension



NBX-2201

2MP True WDR Box Network Camera

Key Features

- 2MP Resolution, 50/60fps
- C/CS Mount Lens
- True WDR(120dB)
- True Day & Night
- Audio In/Out(1/1), Alarm In/Out(1/1)
- RS485 Control Output
- Micro SD Card up to 32GB
- PoE, 12VDC, 24VAC

Technical Specifications

Model	NBX-2201	
IMAGE		
Lens	C/CS Mount	
Angle of View	Lens Dependent	
Image Sensor	Type	1/2.8" SONY Exmor CMOS Sensor
	Pixels	1944(H)x1224(V)
Min. Illumination	Color : 0.1 Lux / BW : 0.01Lux@F1.2, 50IRE	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	True WDR(120dB)	
Day and Night Mode	True Day & Night(Auto, Day, Night)	
Noise Reduction	3DNR	
Digital Zoom	Yes(ROI)	
Exposure Control	Auto, Hold Current	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Aisle	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
Motorized Lens Control	Yes	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 50/60fps@Full-HD	
Streaming	50/60fps(Dual Stream : H.264x1, MJPEGx1), 25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Composite Out	Yes	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Video Contents Analysis	DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, Audio Alert, AIHM	
Audio Alert	User-Defined 3 Audio files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager, NC-Titanium	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	IPv4/IPv6, Manual, TCP/IP, UDP, HTTP, RTP, RTSP, NTP, DHCP, SMTP, DDNS, HTTPS, RTCP, FTP, Bonjour	
Client Software	Web, SmartManager, NC-Titanium, Tive HD	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	3.5mm Stereo Jack	
Audio	1 Input, 1 Output(3.5mm Stereo Jack)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC(Max. 32GB)	
RS485	Yes	
OSD Remote Control	Wired Remote Controller(3.5mm Stereo Jack, Optional)	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-10~+50 °C	
Power Supply	PoE(IEEE802.3 af Compliance, Class0), 12VDC, 24VAC	
Power Consumption	130mA(6.3W)@PoE / 440mA(5.3W)@12VDC / 490mA(5.9W)@24VAC	
Dimension	81.6(W)x68(H)x123(D)mm	
Net Weight	350g	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Quad Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

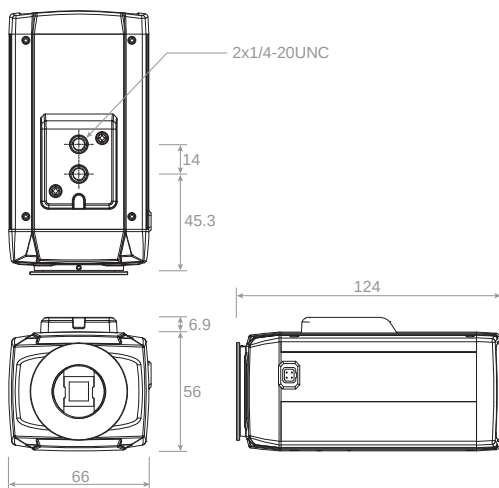
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HCH Housing Series
- HCS Bracket Series

Dimension



Unit : mm

NBX-6293

2MP Box Network Camera

Key Features

- 2MP Resolution
- C/CS Mount Lens
- True Day & Night
- D-WDR(ATR-EX)
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC

Technical Specifications

Model		NBX-6293
IMAGE		
Lens		C/CS Mount
Angle of View		Lens Dependent
Image Sensor	Type	1/2.9"SONY Exmor CMOS Sensor
	Pixels	1984(H)x1105(V)
Min. Illumination		Color : 0.1Lux / BW : 0.01Lux@F1.2, 50IRE
Scanning Mode		Progressive Scan
Wide Dynamic Range		Yes
Day and Night Mode		True Day & Night(Auto, Day, Night)
Noise Reduction		3DNR
Digital Zoom		Yes(ROI)
Exposure Control		Auto, Hold Current
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor
Back Light Compensation		Yes
Image Effect		Flip, Mirror
Flicker Free Mode		50Hz, 60Hz
Shutter Speed		Auto(1/10,000~1sec), Manual
VIDEO/AUDIO		
Compression		H.264(Baseline, Main, High Profile), MJPEG
Bitrate Control		CBR, VBR
Resolution		1920x1080, 1280x720/1024, 704x480/576, 640x480, 352x240/288, 320x240
Frame Rate		Max. 25/30fps
Streaming		Max. 25/30fps(Quad Stream : H.264x3, MJPEGx1)
Audio Compression		G.711
Audio Streaming		2 Way
SYSTEM		
Video Contents Analysis		Defog, Tampering, Line Detector, Filed Detector
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)
Privacy Mask Zone		8 Programmable Zone
FTP Uploading		MJPEG
Event Notification		E-mail, FTP, Notification Server, XML Notification, AIHM
Audio Alert		User-Defined 3 Audio files
Login Authority		Administrator, Operator, Guest
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger		4 Programmable Trigger
Security		Multi User Authority, IP Filtering, HTTPS, SSL
Network Time Sync		NTP Server, Synchronized Computer, Manual
Software Reset		Restart, Reset, Factory Default
Hardware Factory Reset		Yes
Auto Recovery		Backup, Restore
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager, NC-Titanium
SD Recording Mode		Event, Continuous
NETWORK		
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour
Client Software		Web, SmartManager, NC-Titanium, Tive HD
Max. User Connection		Live : 10 Users, Playback : 3 Users
API Support		Open API, Onvif Compliance
Mobile Support		Android, iOS
EXTERNAL IN/OUT		
Audio		1 Input, 1 Output(3.5mm Stereo Jack)
Alarm		1 Input, 1 Output(Terminal Block)
Ethernet		RJ-45(10/100Base-T)
u-SD Card		SDHC, SDXC
ETC		
Operating Humidity		0~90%RH(Non-Condensing)
Operating Temperature		-10~+50 °C
Power Supply		PoE(IEEE802.3 af Compliance, Class0), 12VDC
Power Consumption		75mA(3.6W)@PoE, 300mA(3.6W)@12VDC
Dimension		66(W)x56(H)x124(D)mm
Net Weight		245g

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

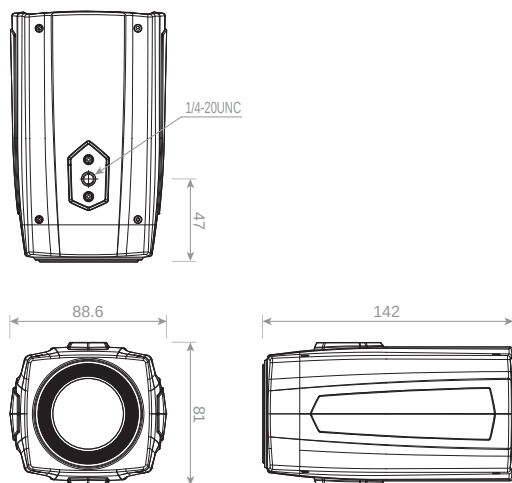
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HCS805E(Box Camera Mount)
- HCS811S(Box Camera Mount)

Dimension



Unit : mm

NZX-2203D1

30x 2MP AF Box Network Camera

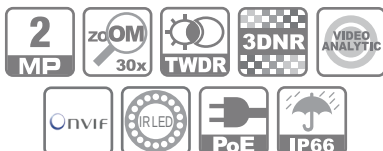
Key Features

- 2MP Resolution, 50/60fps
- 4.3~129mm AF Optical Zoom 30X, Digital Zoom 16X Lens
- True Day & Night
- True WDR(120dB)
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card up to 32GB
- PoE, 12VDC, 24VAC

Technical Specifications

Model	NZX-2203D1
IMAGE	
Lens	4.3~129mm 30x AF Optical Zoom
Angle of View	61.8~2.9°(H)
Image Sensor	1/2.8" Sony STARVIS CMOS Sensor
Min. Illumination	Color : 0.35Lux / BW : 0.013Lux
Scanning Mode	Progressive Scan
Wide Dynamic Range	True WDR(120dB)
Day and Night Mode	True D/N(Auto, Day, Night)
Noise Reduction	3DNR
Digital Zoom	16X
Auto Exposure Control	Auto, Manual, Shutter Priority, Iris Priority
Auto White Balance Control	Auto, Manual, Fluorescent, Sodium Lamp, Incandescent, Outdoor
Back Light Compensation	Yes
Image Rotation	Flip(Digital)
Flickerless Mode	Yes
Shutter Speed	25/30fps : Auto(1/30,000~x8sec), Manual 50/60fps : Auto(1/50,000~x8sec), Manual
VIDEO/AUDIO	
Compression	H.264(Baseline, Main, High Profile), MJPEG
Resolution	1920x1080(Full HD), 1280x1024(SXGA), 1280x720(HD), 704x480(576(D1)), 640x480(VGA), 320x240(QVGA)
Frame Rate	Max. 50/60fps
Streaming	Triple Stream(H.264x2, MJPEGx1) Controllable Frame Rate/Bandwidth, VBR/CVBR
Audio Compression	G.711
Audio Sample Rate	8kHz
Audio Bit Rate	64kbps
Audio Streaming	2 Way
SYSTEM	
FTP Uploading	MJPEG Still Image
DIS	Yes
Privacy Mask Zone	16
Motion Detection	16
Event Notification	E-mail, FTP, HTTP Server, Event Notification, Audio Alert
Audio Alert	Max. 3 Pre-Recorder Voice File Selectable
PTZ Preset	32
Login Authority	Administrator, Operator, Guest
Event Buffering	Pre : 30sec, Post : 30sec
Manual Trigger	Pre : 10sec, Post : 60sec
	Still Image Capture, Alarm Signal Out
Security	Multi User Authority, IP Filtering, HTTPS, SSL
Network Time Sync	NTP Server, Synchronized Computer, Manual
Software Reset	Restart, Reset, Factory Default
Auto Recovery	Backup, Restore
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager
SD Recording Mode	Event, Continuous
NETWORK	
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour
Client Software	Web, SmartManager, NC-Titanium
Max. User Connection	Live : 10 Users, Playback : 3 Users
API Support	Open API, Onvif Compliance
Mobile Support	Android, iOS
EXTERNAL IN/OUT	
Video Composite Out	Yes
Audio	1 Input, 1 Output(Stereo Jack)
Alarm	1 Input, 1 Output
Ethernet	RJ-45(10/100Base-T)
u-SD Card	SDHC(Max. 32GB)
RS485/RS422	Yes
Tele/Far/Wide/Near	Tact Switch
Reset Button	Tact Switch
ETC	
Operating Humidity	0~90%RH(Non-Condensing)
Operating Temperature	-10~+50℃
Power Supply	PoE(IEEE802.3af Compliance, Class2), 12VDC, 24VAC
Power Consumption	150mA(7.2W)@PoE / 600mA(7.2W)@12VDC, 24VAC
Dimension	88.6(W)x81(H)x142(D)mm
Net Weight	Approx. 700g

Specifications are subject to change without notice.



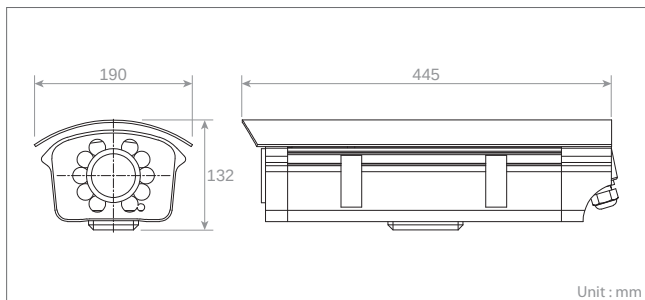
Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MPEG4, MJPEG)
- Onvif Profile S
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- VCA(DIS, Defog, Face Detection, Tampering, Line Detector, Field Detector)
- Event Buffering

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



Unit : mm

NHX-2200D1

10X 2MP IR Housing Network Camera

Key Features

- 2MP Resolution, 50/60fps
- Optical Zoom 10X, Digital Zoom 16X
- 100m Long Range IR LED
- True WDR, True Day & Night
- SD Card Support up to 32GB
- PoE Support
- IP66

Technical Specifications

Model		NHX-2200D1	
IMAGE			
Lens		Optical Zoom 10X(5.1~51mm)	
Angle of View		54~4.9°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor	
	Pixels	1945(H)x1097(V)	
Min. Illumination		Color : 0.35Lux@50IRE / BW : 0Lux(IR LED On)	
Scanning Mode		Progressive Scan	
Wide Dynamic Range		True WDR	
Day and Night Mode		True D/N(Auto, Day, Night)	
Noise Reduction		3DNR	
Digital Zoom		16X	
Exposure Control		Auto, Manual, Shutter Priority, Iris Priority	
White Balance Control		Auto, Manual, Incandescent, Fluorescent, Outdoor	
Back Light Compensation		Yes	
Image Effect		Flip(Digital)	
Shutter Speed		25/30fps : Auto(1/30,000~x8 sec), Manual 50/60fps : Auto(1/50,000~x8 sec), Manual	
IR Illuminator	Quantity	10 Power IR LEDs	
	Angle	60°(H)	
	Distance	100m	
VIDEO/AUDIO			
Compression		H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control		CVBR, VBR	
Resolution		1920x1080, 1280x1024, 1280x720/960, 704x480/576, 640x360/480, 320x240	
Frame Rate		Max. 50/60fps	
Streaming		50/60fps(Dual Stream : H.264x1, MJPEGx1) 25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Audio Compression		G.711	
Audio Streaming		2 Way	
SYSTEM			
Video Contents Analysis		DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector	
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone		16	
Preset		32	
FTP Uploading		MJPEG	
Event Notification		E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert		User-Defined 3 Audio Files	
Login Authority		Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec	
	SD Record	Pre : 10sec, Post : 60sec	
Manual Trigger		4 Programmable Trigger	
Security		Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync		NTP Server, Synchronized Computer, Manual	
Software Reset		Restart, Reset, Factory Default	
Hardware Factory Reset		Yes	
Auto Recovery		Backup, Restore	
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode		Event, Continuous	
NETWORK			
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software		Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection		Live : 10 Users, Playback : 3 Users	
API Support		Open API, Onvif Compliance	
Mobile Support		Android, iOS	
EXTERNAL IN/OUT			
Video Composite Out		Yes(BNC Jack)	
Audio		1 Input, 1 Output(3.5mm Stereo Jack)	
Alarm		1 Input, 1 Output	
Ethernet		RJ-45(10/100Base-T)	
u-SD Card		SDHC(Max.32GB)	
RS485/RS422		Yes	
Reset Button		Tact Switch	
ETC			
Operating Humidity		0~90%RH(Non-Condensing)	
Operating Temperature		-30~+50 °C	
Power Supply		PoE(Injector), 12VDC	
Power Consumption		0.54A(30W)@PoE / 2.5mA(30W)@12VDC	
Dimension		190(W)x132(H)x445(D)mm	
Net Weight		3850g	
Ingress Protection		IP66	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- Video Contents Analysis

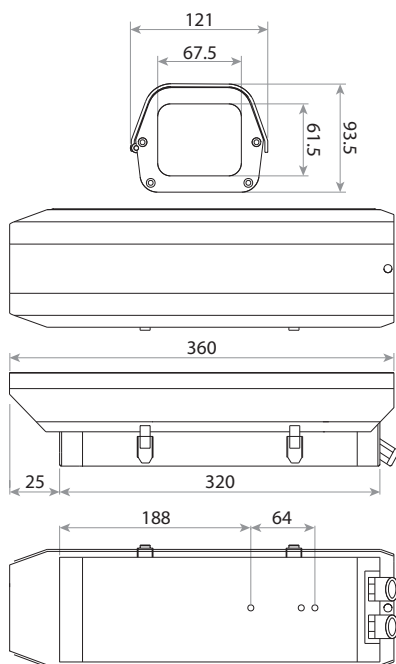
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HCS170(Wall Mount)

Dimension



Unit : mm

NHX-630A1R

3MP IR Housing Network Camera

Key Features

- 3MP Resolution 25/30fps
- Motorized Varifocal 2.8~12mm Lens
- True Day & Night
- WDR(ATR-EX)
- 60m IR Distance
- SD Card(SDHC, SDXC)
- PoE
- IP66

Technical Specifications

Model		NHX-630A1R	
IMAGE			
Lens		Motorized Varifocal 2.8~12mm, F1.4	
Angle of View		97~37°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor	
	Pixels	2065(H)x1553(V)	
Min. Illumination		Color : 0.4Lux@50IRE / BW : 0Lux@50IRE	
Scanning Mode		Progressive Scan	
Wide Dynamic Range		Yes(72dB)	
Day and Night Mode		True D/N(Auto, Day, Night)	
Noise Reduction		3DNR	
Digital Zoom		Yes(ROI)	
Exposure Control		Auto	
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor	
Back Light Compensation		BLC, HLC	
Image Effect		Flip, Mirror, Aisle, Defog, SLDC	
Flicker Free Mode		50Hz, 60Hz	
Shutter Speed		Auto(1/10,000~1 sec), Manual	
IR Illuminator	Quantity	4 Power IR LEDs	
	Angle	60°(H)	
	Distance	Up to 60m	
VIDEO/AUDIO			
Compression		H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control		CVBR, VBR	
Resolution		2048x1536, 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate		Max. 25/30fps	
Streaming		25/30fps(Triple Stream : H.264x2, MJPEGx1)	
SYSTEM			
Video Contents Analysis		Tampering, Line Detector, Field Detector	
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone		8 Programmable Zone	
FTP Uploading		MJPEG	
Event Notification		E-mail, FTP, Notification Server, XML Notification, AIHM	
Login Authority		Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec	
	SD Record	Pre : 10sec, Post : 60sec	
Manual Trigger		4 Programmable Trigger	
Security		Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync		NTP Server, Synchronized Computer, Manual	
Software Reset		Restart, Reset, Factory Default	
Hardware Factory Reset		Yes	
Auto Recovery		Backup, Restore	
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode		Event, Continuous	
NETWORK			
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software		Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection		Live : 10 Users, Playback : 3 Users	
API Support		Open API, Onvif Compliance	
Mobile Support		Android, iOS	
EXTERNAL IN/OUT			
Ethernet		RJ-45(10/100Base-T)	
u-SD Card		SDHC, SDXC	
ETC			
Operating Humidity		0~90%RH(Non-Condensing)	
Operating Temperature		-20~+50 °C	
Power Supply		PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption		0.3A(15W)@PoE / 1.25A(15W)@12VDC	
Dimension		121(W)x93.5(H)x360(D)mm	
Net Weight		Approx. 1500g	
Ingress Protection		IP66	

Specifications are subject to change without notice.



Key Functions

- Smart Codec
- Intelligent Video Motion Detection, Intrusion Detector
- Quad Stream(H.264/H.265, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking

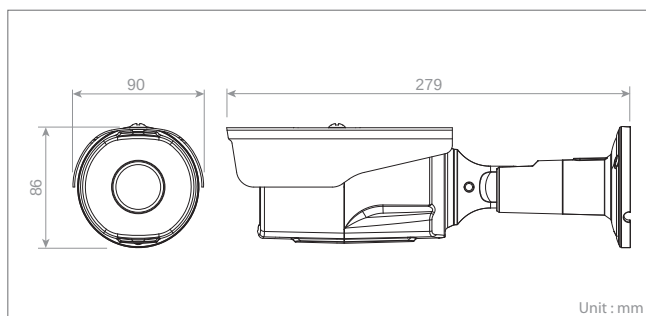
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HJB200(Junction Box)

Dimension



NUH-52J1

2MP IR WDR Motorized Bullet Network Camera

Key Features

- H.265, H.264 Support
- 2M Resolution
- Motorized Varifocal 2.8~12mm Lens
- True WDR
- True Day & Night
- 35 IR LEDs for 40m Coverage
- Alarm In/Out(1/1), Audio In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP66

Technical Specifications

Model		NUH-52J1
IMAGE		
Lens		Motorized Varifocal 2.8~12mm, F1.6
Angle of View		100~33°(H)
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor
	Pixels	1945(H)x1109(V)
Min. Illumination		Color : 0.1Lux@F1.6 / BW : 0Lux@F1.6
Scanning Mode		Progressive Scan
Wide Dynamic Range		True WDR
Day and Night Mode		True D/N(Auto, Day, Night)
Noise Reduction		2DNR, 3DNR
Digital Zoom		Yes(ROI)
Exposure Control		Auto
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor, Manual
Metering Mode		Spot(BLC), Center, Average, Left, Right
Image Effect		Flip, Mirror, Defog
Flicker Free Mode		50Hz, 60Hz
Shutter Speed		Auto(1/10,000~1sec), Manual
IR Illuminator	Quantity	35 IR LEDs
	Distance	Up to 40m
Motorized Lens Control		Smart Focus, Manual
VIDEO/AUDIO		
Compression		H.264/H.265(Baseline, Main, High Profile), MJPEG
Bitrate Control		CBR, CVBR
Resolution		1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240
Frame Rate		Max. 25/30fps
Streaming		Quad Stream : H.264/H.265x3, MJPEGx1
Composite Out		Yes
Audio Compression		G.711
Audio Streaming		2 Way
SYSTEM		
Video Contents Analysis		Tampering, iVMD, Intrusion Detector
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)
Privacy Mask Zone		8 Programmable Zone
FTP Uploading		MJPEG
Event Notification		E-mail, FTP, Notification Server, XML Notification, Audio Alert
Audio Alert		User Defined 3 Audio File
Login Authority		Administrator, Operator, Guest
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger		4 Programmable Trigger
Security		Multi User Authority, IP Filtering, HTTPS, SSL
Network Time Sync		NTP Server, Synchronized Computer, Manual
Software Reset		Restart, Reset, Factory Default
Hardware Factory Reset		Yes
Auto Recovery		Backup, Restore
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager
SD Recording Mode		Event, Continuous
NETWORK		
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour
Client Software		Web, SmartManager, Client S/W, Mobile S/W
Max. User Connection		Live : 10 Users, Playback : 3 Users
API Support		Open API, Onvif Compliance
Mobile Support		Android, iOS
EXTERNAL IN/OUT		
Video Composite Out		Yes
Audio		1 Input, 1 Output(Terminal Block)
Alarm		1 Input, 1 Output(Terminal Block)
Ethernet		RJ-45(10/100Base-T)
u-SD Card		SDHC, SDXC
ETC		
Operating Humidity		0~90% RH(Non-Condensing)
Operating Temperature		-20~+50 °C
Power Supply		PoE(IEEE802.3af Compliance, Class0)/12VDC
Power Consumption		200mA(9W)@PoE / 710mA(7.6W)@12VDC
Dimension		90(W)x86(H)x279(D)mm
Net Weight		Approx. 1030g
Ingress Protection		IP66

Specifications are subject to change without notice.

NUH-1231

2MP IR Bullet Network Camera



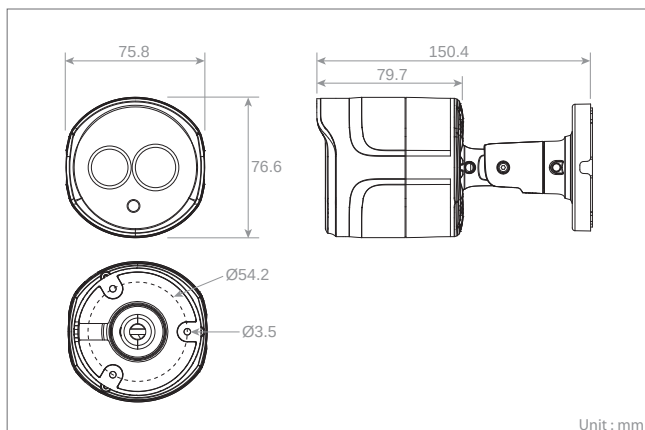
Key Functions

- Smart Codec
- Intelligent Video Motion Detection, Intrusion Detector
- Triple Stream(H.264/H.265, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



Unit : mm

Key Features

- H.265, H.264 Support
- 2MP Resolution
- 3.6mm Fixed Lens
- True Day & Night
- WDR(ATR-EX)
- 30m IR Distance
- PoE
- IP66

Technical Specifications

Model	NUH-1231	
IMAGE		
Lens	Fixed Focal 3.6mm, F2.1	
Angle of View	83°(H)	
Image Sensor	Type	1/2.9" Sony Exmor CMOS
	Pixels	1984(H)x1125(V)
Min. Illumination	Color : 0.1Lux / BW : 0Lux@F2.1	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	Yes	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	3DNR	
Digital Zoom	ROI	
Exposure Control	Auto	
White Balance Control	Auto, Manual	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Defog	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	1 Array LED
	Angle	90°
	Distance	30m
VIDEO/AUDIO		
Compression	H.264/H.265(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CBR, CVBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240	
Frame Rate	Max. 30/25fps(NTSC/PAL)	
Streaming	Triple Stream : H.264/H.265x2, MJPEGx1	
SYSTEM		
Video Contents Analysis	Tampering, iVMD, Intrusion Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	4 Programmable Zone	
Smart Codec ROI	8 Regions	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification	
Login Authority	Administrator, Operator, Guest	
Event Buffering(FTP)	Pre : 30sec, Post : 30sec	
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	-	
Audio	-	
Alarm	-	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	-	
ETC		
Operating Humidity	95% or less(Non-Condensing)	
Operating Temperature	-20~+50 °C	
Power Supply	PoE/12VDC	
Power Consumption	87mA(4.2W)@PoE / 280mA(3.4W)@12VDC	
Dimension	75.8(W)x76.6(H)x150.4(D)mm	
Net Weight	300g	
Ingress Protection	IP66	

Specifications are subject to change without notice.



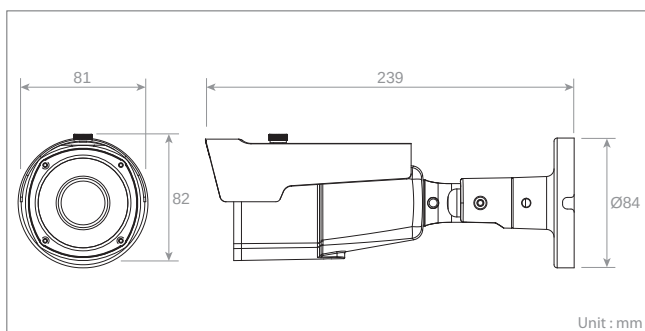
Key Functions

- Smart Codec
- Intelligent Video Motion Detection, Intrusion Detector
- Triple Stream(H.264/H.265, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



Unit : mm

NUH-12J2

2MP IR Motorized Bullet Network Camera

Key Features

- H.265, H.264 Support
- 2MP Resolution
- Motorized Varifocal 2.8~12mm Lens
- True Day & Night
- WDR(ATR-EX)
- 24 IR LEDs for 30m Coverage
- PoE
- IP66

Technical Specifications

Model	NUH-12J2	
IMAGE		
Lens	Motorized Varifocal 2.8~12mm F1.4	
Angle of View	94°(H)~34°(H)	
Image Sensor	Type	1/2.9" Sony Exmor CMOS
	Pixels	1984(H)x1125(V)
Min. Illumination	Color : 0.1Lux@F2.1 / BW : 0Lux@F2.1(IR LED On)	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	Yes	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	2DNR, 3DNR	
Digital Zoom	ROI	
Exposure Control	Auto	
White Balance Control	Auto, Manual	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Defog	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	24 IR LEDs
	Angle	90/30°(H)
	Distance	30m
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CBR, CVBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240	
Frame Rate	Max. 30/25fps(NTSC/PAL)	
Streaming	Triple Stream : H.264/H.265x2, MJPEGx1	
SYSTEM		
Video Contents Analysis	Tampering, iVMD, Intrusion Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	4 Programmable Zone	
Smart Codec ROI	8 Regions	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification	
Login Authority	Administrator, Operator, Guest	
Event Buffering(FTP)	Pre : 30sec, Post : 30sec	
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	-	
Audio	-	
Alarm	-	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	-	
ETC		
Operating Humidity	95% or less(Non-Condensing)	
Operating Temperature	-20~+50℃	
Power Supply	PoE/12VDC	
Power Consumption	145mA(7W)@PoE / 480mA(5.8W)@12VDC	
Dimension	81(W)x82(H)x239(D)mm	
Net Weight	680g	
Ingress Protection	IP66	

Specifications are subject to change without notice.



Key Functions

- Smart Codec
- Intelligent Video Motion Detection, Intrusion Detector
- Quad Stream(H.264/H.265, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking

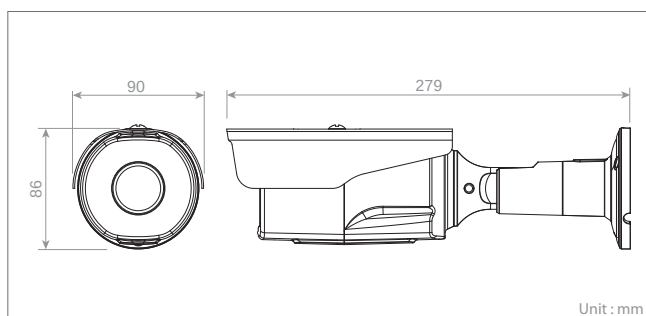
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HJB200(Junction Box)

Dimension



NUH-64J1

4MP IR WDR Motorized Bullet Network Camera

Key Features

- H.265, H.264 Support
- 4M Resolution
- Motorized Varifocal 2.8~12mm Lens
- True WDR
- True Day & Night
- 35 IR LEDs for 40m Coverage
- Alarm In/Out(1/1), Audio In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP66

Technical Specifications

Model		NUH-64J1
IMAGE		
Lens		Motorized Varifocal 2.8~12mm, F1.6
Angle of View		97~31°(H)
Image Sensor	Type	1/3" CMOS Sensor
	Pixels	2688(H)x1520(V)
Min. Illumination		Color : 0.1Lux@F1.6 / BW : 0Lux@F1.6(IR LED On)
Scanning Mode		Progressive Scan
Wide Dynamic Range		True WDR
Day and Night Mode		True D/N(Auto, Day, Night)
Noise Reduction		2DNR, 3DNR
Digital Zoom		Yes(ROI)
Exposure Control		Auto
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor, Manual
Metering Mode		Spot(BLC), Center, Average, Left, Right
Image Effect		Flip, Mirror, Defog
Flicker Free Mode		50Hz, 60Hz
Shutter Speed		Auto(1/10,000~1sec), Manual
IR Illuminator	Quantity	35 IR LEDs
	Distance	Up to 40m
Motorized Lens Control		Smart Focus, Manual
VIDEO/AUDIO		
Compression		H.264/H.265(Baseline, Main, High Profile), MJPEG
Bitrate Control		CBR, CVBR
Resolution		2592x1520, 2048x1520, 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240
Frame Rate		Max. 25/30fps
Streaming		Quad Stream : H.264/H.265x3, MJPEGx1
Composite Out		Yes
Audio Compression		G.711
Audio Streaming		2 Way
SYSTEM		
Video Contents Analysis		Tampering, iVMD, Intrusion Detector
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)
Privacy Mask Zone		8 Programmable Zone
FTP Uploading		MJPEG
Event Notification		E-mail, FTP, Notification Server, XML Notification, Audio Alert
Audio Alert		User Defined 3 Audio File
Login Authority		Administrator, Operator, Guest
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger		4 Programmable Trigger
Security		Multi User Authority, IP Filtering, HTTPS, SSL
Network Time Sync		NTP Server, Synchronized Computer, Manual
Software Reset		Restart, Reset, Factory Default
Hardware Factory Reset		Yes
Auto Recovery		Backup, Restore
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager
SD Recording Mode		Event, Continuous
NETWORK		
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour
Client Software		Web, SmartManager, Client S/W, Mobile S/W
Max. User Connection		Live : 10 Users, Playback : 3 Users
API Support		Open API, Onvif Compliance
Mobile Support		Android, iOS
EXTERNAL IN/OUT		
Video Composite Out		Yes
Audio		1 Input, 1 Output(Terminal Block)
Alarm		1 Input, 1 Output(Terminal Block)
Ethernet		RJ-45(10/100Base-T)
u-SD Card		SDHC, SDXC
ETC		
Operating Humidity		0~90% RH(Non-Condensing)
Operating Temperature		-20~+50 °C
Power Supply		PoE(IEEE802.3af Compliance, Class0)/12VDC
Power Consumption		200mA(9W)@PoE / 710mA(7.6W)@12VDC
Dimension		90(W)x86(H)x279(D)mm
Net Weight		Approx. 1030g
Ingress Protection		IP66

Specifications are subject to change without notice.

NUH-2431

4MP IR Bullet Network Camera

Key Features

- H.265, H.264 Support
- 4MP Resolution
- 3.6mm Fixed Lens
- True Day & Night
- WDR(ATR-EX)
- 30m IR Distance
- PoE
- IP66



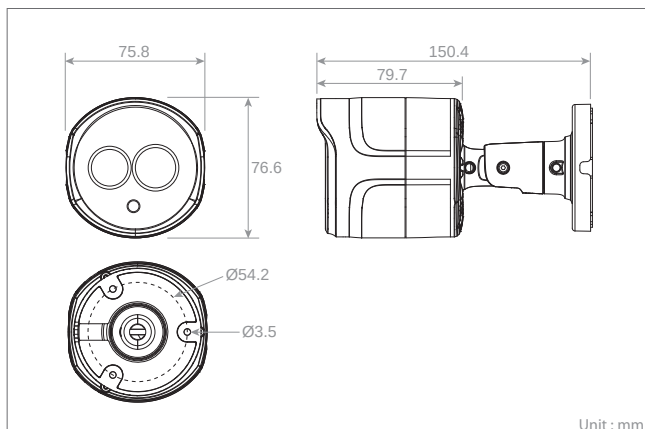
Key Functions

- Smart Codec
- Intelligent Video Motion Detection, Intrusion Detector
- Triple Stream(H.264/H.265, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



Unit : mm

Technical Specifications

Model		NUH-2431	
IMAGE			
Lens		Fixed Focal 3.6mm, F2.1	
Angle of View		83°(H)	
Image Sensor	Type	1/3" CMOS Sensor	
	Pixels	2688(H)x1520(V)	
Min. Illumination		Color : 0.1Lux / BW : 0Lux@F2.1 (IR LED On)	
Scanning Mode		Progressive Scan	
Wide Dynamic Range		Yes	
Day and Night Mode		True D/N(Auto, Day, Night)	
Noise Reduction		3DNR	
Digital Zoom		ROI	
Exposure Control		Auto	
White Balance Control		Auto, Manual	
Back Light Compensation		Yes	
Image Effect		Flip, Mirror, Defog	
Flicker Free Mode		50Hz, 60Hz	
Shutter Speed		Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	1 Array LED	
	Angle	90°	
	Distance	30m	
VIDEO/AUDIO			
Compression		H.264/H.265(Baseline, Main, High Profile), MJPEG	
Capture Mode		4M(2592x1520) or 2M(1920x1080)	
Bitrate Control		CBR, CVBR	
Resolution	4M Capture Mode : 2592x1520, 2048x1520, 1920x1080, 1280x1024, 1280x720/960, 704x480/576, 640x480, 320x240		
	2M Capture Mode : 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240		
Frame Rate		4M Capture Mode : Max. 20/20fps(NTSC/PAL) 2M Capture Mode : Max. 30/25fps(NTSC/PAL)	
Streaming		Triple Stream : H.264/H.265x2, MJPEGx1	
SYSTEM			
Video Contents Analysis		Tampering, iVMD, Intrusion Detector	
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone		4 Programmable Zone	
Smart Codec ROI		8 Regions	
FTP Uploading		MJPEG	
Event Notification		E-mail, FTP, Notification Server, XML Notification	
Login Authority		Administrator, Operator, Guest	
Event Buffering(FTP)		Pre : 30sec, Post : 30sec	
Manual Trigger		4 Programmable Trigger	
Security		Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync		NTP Server, Synchronized Computer, Manual	
Software Reset		Restart, Reset, Factory Default	
Auto Recovery		Backup, Restore	
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
NETWORK			
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software		Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection		Live : 10 Users, Playback : 3 Users	
API Support		Open API, Onvif Compliance	
Mobile Support		Android, iOS	
EXTERNAL IN/OUT			
Video Composite Out		-	
Audio		-	
Alarm		-	
Ethernet		RJ-45(10/100Base-T)	
u-SD Card		-	
ETC			
Operating Humidity		95% or less(Non-Condensing)	
Operating Temperature		-20~+50 °C	
Power Supply		PoE/12VDC	
Power Consumption		106mA(5.1W)@PoE / 320mA(3.8W)@12VDC	
Dimension		75.8(W)x76.6(H)x150.4(D)mm	
Net Weight		300g	
Ingress Protection		IP66	

Specifications are subject to change without notice.



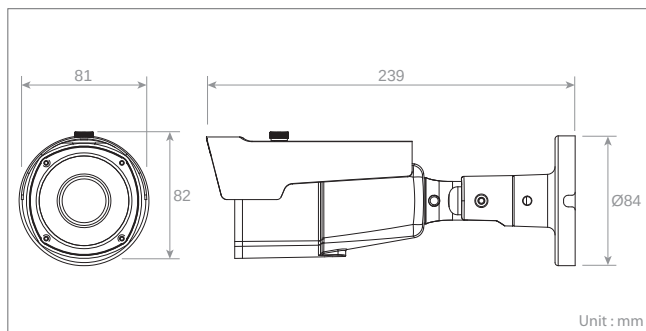
Key Functions

- Smart Codec
- Intelligent Video Motion Detection, Intrusion Detector
- Triple Stream(H.264/H.265, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



NUH-24J2

4MP IR Motorized Bullet Network Camera

Key Features

- H.265, H.264 Support
- 4M Resolution
- Motorized Varifocal 2.8~12mm Lens
- True Day & Night
- WDR(ATR-EX)
- 24 IR LEDs for 30m Coverage
- PoE
- IP66

Technical Specifications

Model		NUH-24J2	
IMAGE			
Lens		Motorized Varifocal 2.8~12mm	
Angle of View		94~34°(H)	
Image Sensor	Type	1/3" CMOS Sensor	
	Pixels	2688(H)x1520(V)	
Min. Illumination		Color : 0.1Lux@F2.1 / BW : 0Lux@F2.1(IR LED On)	
Scanning Mode		Progressive Scan	
Wide Dynamic Range		Yes	
Day and Night Mode		True D/N(Auto, Day, Night)	
Noise Reduction		2DNR, 3DNR	
Digital Zoom		ROI	
Exposure Control		Auto	
White Balance Control		Auto, Manual	
Back Light Compensation		Yes	
Image Effect		Flip, Mirror, Defog	
Flicker Free Mode		50Hz, 60Hz	
Shutter Speed		Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	24 IR LEDs	
	Angle	90/30°(H)	
	Distance	30m	
VIDEO/AUDIO			
Compression		H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control		CBR, CVBR	
Resolution		4M Capture Mode : 2592x1520, 2048x1520, 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240 2M Capture Mode : 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240	
Frame Rate		4M Capture Mode : Max. 20/20fps(NTSC/PAL) 2M Capture Mode : Max. 30/25fps(NTSC/PAL)	
Streaming		Triple Stream : H.264/H.265x2, MJPEGx1	
SYSTEM			
Video Contents Analysis		Tampering, iVMD, Intrusion Detector	
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone		4 Programmable Zone	
Smart Codec ROI		8 Regions	
FTP Uploading		MJPEG	
Event Notification		E-mail, FTP, Notification Server, XML Notification	
Login Authority		Administrator, Operator, Guest	
Event Buffering(FTP)		Pre : 30sec, Post : 30sec	
Manual Trigger		4 Programmable Trigger	
Security		Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync		NTP Server, Synchronized Computer, Manual	
Software Reset		Restart, Reset, Factory Default	
Auto Recovery		Backup, Restore	
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
NETWORK			
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software		Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection		Live : 10 Users, Playback : 3 Users	
API Support		Open API, Onvif Compliance	
Mobile Support		Android, iOS	
EXTERNAL IN/OUT			
Video Composite Out		-	
Audio		-	
Alarm		-	
Ethernet		RJ-45(10/100Base-T)	
u-SD Card		-	
ETC			
Operating Humidity		95% or less(Non-Condensing)	
Operating Temperature		-20~+50 °C	
Power Supply		PoE/12VDC	
Power Consumption		145mA(7W)@PoE / 480mA(5.8W)@12VDC	
Dimension		81(W)x82(H)x239(D)mm	
Net Weight		680g	
Ingress Protection		IP66	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Quad Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering
- Video Contents Analysis

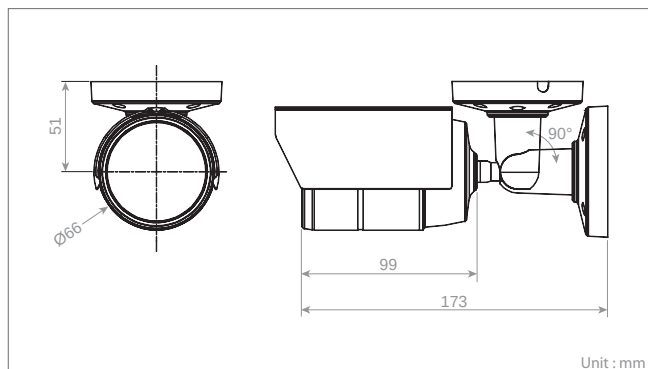
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HJB200(Junction Box)

Dimension



NUX-6213R

2MP IR Bullet Network Camera

Key Features

- 2MP Resolution, 25/30fps
- Fixed 3.7mm Lens
- True Day & Night
- D-WDR(ATR-EX)
- 24 IR LEDs for 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP67

Technical Specifications

Model	NUX-6213R	
IMAGE		
Lens	Fixed 3.7mm, F2.5	
Angle of View	90°(H)	
Image Sensor	Type	1/2.9" SONY Exmor CMOS Sensor
	Pixels	1984(H)x1105(V)
Min. Illumination	Color : 0.2Lux / BW : 0Lux@F2.5, 50IRE(IR LED On)	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	D-WDR(ATR-EX)	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	3DNR	
Digital Zoom	Yes(ROI)	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor, Manual	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Aisle, Defog, HLC, S-LDC	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	24 IR LEDs
	Angle	76°(H)
	Distance	Up to 25m
Motorized Lens Control	-	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 25/30fps	
Streaming	25/30fps(Quad Stream : H.264x3, MJPEGx1)	
Composite Out	-	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Video Contents Analysis	Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	-	
Audio	1 Input, 1 Output(Terminal Block)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC, SDXC	
RS485	-	
OSD Remote Control	-	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-20~+50 °C	
Power Supply	PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption	120mA(5.7W)@PoE / 450mA(5.4W)@12VDC	
Dimension	66(Ø)x173(D)mm	
Net Weight	Approx. 430g	
Ingress Protection	IP67	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Quad Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering
- Video Contents Analysis

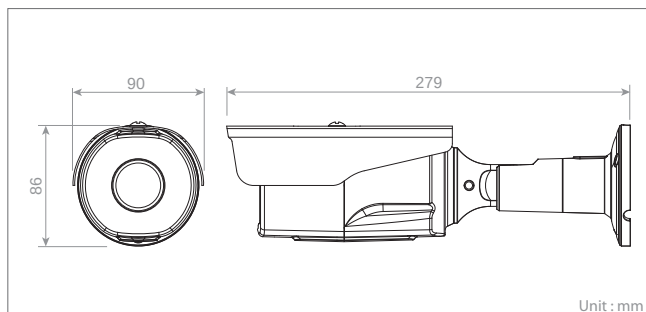
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HJB200(Junction Box)

Dimension



NUX-6277R

2MP IR Bullet Network Camera

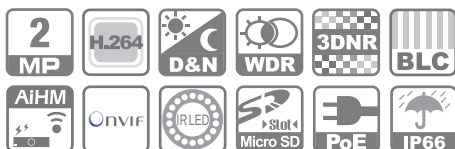
Key Features

- 2MP Resolution, 25/30fps
- Motorized Varifocal 2.8~12mm, F1.4 Lens
- True Day & Night
- D-WDR(72dB)
- 35 IR LEDs for 35m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP66

Technical Specifications

Model		NUX-6277R
IMAGE		
Lens		Motorized Varifocal 2.8~12mm, F1.4, DC Iris
Angle of View		105~37°(H)
Image Sensor	Type	1/2.9" SONY Exmor CMOS Sensor
	Pixels	1920(H)x1080(V) 2.07M
Min. Illumination		Color : 0.1Lux@F1.4 / BW : 0Lux@F1.4
Scanning Mode		Progressive Scan
Wide Dynamic Range		D-WDR(72dB)
Day and Night Mode		True D/N(Auto, Day, Night)
Noise Reduction		3DNR
Digital Zoom		Yes(ROI)
Exposure Control		Auto
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor, Manual
Back Light Compensation		Yes
Image Effect		Flip, Mirror, Aisle, Defog, HLC, S-LDC
Flicker Free Mode		50Hz, 60Hz
Shutter Speed		Auto(1/10,000~1sec), Manual
IR Illuminator	Quantity	35 IR LEDs
	Angle	76°(H)
	Distance	Up to 35m
Motorized Lens Control		Smart Focus, Manual
VIDEO/AUDIO		
Compression		H.264(Baseline, Main, High Profile), MJPEG
Bitrate Control		CVBR, VBR
Resolution		1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240
Frame Rate		Max. 25/30fps
Streaming		25/30fps(Quad Stream : H.264x3, MJPEGx1)
Composite Out		-
Audio Compression		G.711
Audio Streaming		2 Way
SYSTEM		
Video Contents Analysis		Tampering, Line Detector, Field Detector
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)
Privacy Mask Zone		8 Programmable Zone
FTP Uploading		MJPEG
Event Notification		E-mail, FTP, Notification Server, XML Notification, AIHM
Audio Alert		User-Defined 3 Audio Files
Login Authority		Administrator, Operator, Guest
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger		4 Programmable Trigger
Security		Multi User Authority, IP Filtering, HTTPS, SSL
Network Time Sync		NTP Server, Synchronized Computer, Manual
Software Reset		Restart, Reset, Factory Default
Hardware Factory Reset		Yes
Auto Recovery		Backup, Restore
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager
SD Recording Mode		Event, Continuous
NETWORK		
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour
Client Software		Web, SmartManager, Client S/W, Mobile S/W
Max. User Connection		Live : 10 Users, Playback : 3 Users
API Support		Open API, Onvif Compliance
Mobile Support		Android, iOS
EXTERNAL IN/OUT		
Video Composite Out		-
Audio		1 Input, 1 Output(Terminal Block)
Alarm		1 Input, 1 Output(Terminal Block)
Ethernet		RJ-45(10/100Base-T)
u-SD Card		SDHC, SDXC
RS485		-
OSD Remote Control		-
ETC		
Operating Humidity		0~90%RH(Non-Condensing)
Operating Temperature		-20~+50 °C
Power Supply		PoE(IEEE802.3af Compliance, Class0), 12VDC
Power Consumption		150mA(7.2W)@PoE / 590mA(7W)@12VDC
Dimension		90(W)x86(H)x279(D)mm
Net Weight		Approx. 1030g
Ingress Protection		IP66

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AiHM Event
- Event Buffering

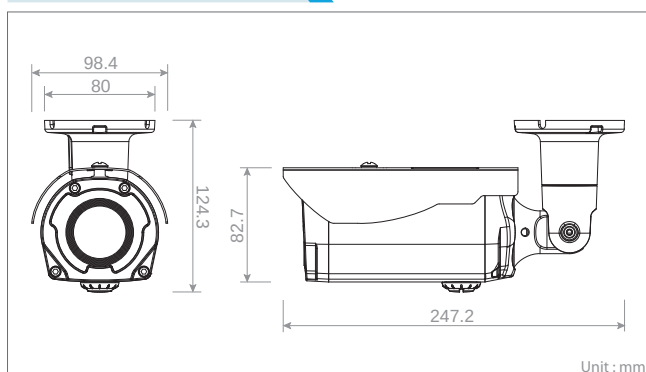
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HJB200(Junction Box)

Dimension



NUX-2245D

2MP True WDR Bullet Network Camera

Key Features

- 2MP Resolution, 50/60fps
- Motorized Varifocal 2.8~11mm(F1.4)
- True WDR(120dB)
- True Day & Night
- 32 IR LEDs For 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Easy IP Address Setup by Wired Remote Controller(Remote Controller Optional)
- SD Card up to 32GB
- PoE, 12VDC

Technical Specifications

Model	NUX-2245D	
IMAGE		
Lens	Motorized Vari-Focal 2.8~11.0mm, F1.4, DC IRIS	
Angle of View	105~38°(H)	
Image Sensor	Type	1/2.8" SONY Exmor CMOS Sensor
	Pixels	1944(H)x1224(V)
Min. Illumination	Color : 0.1Lux / BW : 0 Lux@F1.4, 50IRE(IR LED On)	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	True WDR(120dB)	
Day and Night Mode	True Day & Night(Auto, Day, Night)	
Noise Reduction	3DNR	
Digital Zoom	Yes(ROI)	
Exposure Control	Auto, Hold Current	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Aisle	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~10sec), Manual	
IR Illuminator	Quantity	32 IR LEDs
	Angle	78°
	Distance	25m
Motorized Lens Control	Smart Focus, Manual	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	1920x1080, 1280x720/960/1024, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 50/60fps@Full-HD	
Streaming	50/60fps(Dual Stream : H.264x1, MJPEGx1), 25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Composite Out	Yes	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Video Contents Analysis	DIS, Defog, Face Detection, Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, Audio Alert, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager, NC-Titanium	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, NC-Titanium, Tive HD	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	3.5mm Stereo Jack	
Audio	1 Input, 1 Output(3.5mm Stereo Jack)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC(Max. 32GB)	
OSD Remote Control	Wired Remote Controller(3.5mm Stereo Jack, Optional)	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-30~+50 °C	
Power Supply	PoE(IEEE802.3 af Compliance, Class0), 12VDC	
Power Consumption	260mA(12.4W)@PoE, 870mA(10.4W)@12VDC, 2.33A(30W)@12VDC with Heater	
Dimension	98.4(W)x124.3(H)x247.2(D)mm	
Net Weight	1040g	
Ingress Protection	IP66	

Specifications are subject to change without notice.

NAX-2200D1

10X 2MP WDR Bullet Network Camera

Key Features

- 2MP Resolution, 50/60fps
- 5.1~51mm 10x AF Optical Zoom Lens
- True WDR(120dB)
- True Day & Night
- 32 IR LEDs for 25m Coverage
- Alarm In/Out(1/1), Audio In/Out(1/1)
- Micro SD Card up to 32GB
- PoE, 12VDC
- IP66

Technical Specifications

Model	NAX-2200D1	
IMAGE		
Lens	Optical Zoom 10X, 5.1~51mm	
Angle of View	54~4.9°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor
	Pixels	1945(H)x1097(V)
Min. Illumination	Color : 0.35Lux / BW : 0Lux, 50IRE	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	True WDR(120dB)	
Day and Night Mode	True Day & Night(Auto, Day, Night)	
Noise Reduction	3DNR	
Digital Zoom	16X	
Exposure Control	Auto, Manual, Shutter Priority, Iris Priority	
White Balance Control	Auto, Fluorescent, Incandescent, Outdoor, Manual	
Back Light Compensation	Yes	
Image Effect	Flip(Digital)	
Shutter Speed	25/30fps : Auto(1/30,000~x8sec), Manual 50/60fps : Auto(1/50,000~x8sec), Manual	
IR Illuminator	Quantity	32 IR LEDs
	Angle	78°(H)
	Distance	Up to 25m
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 50/60fps	
Streaming	50/60fps(Dual Stream : H.264x1, MJPEGx1) 25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Audio Compression	G.711	
Audio Streaming	2 Way	
PTZ FUNCTION		
Preset	32	
SYSTEM		
Video Contents Analysis	DIS, Defog, Face Detection, Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	16 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, Audio Alert, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP SD Record	Pre : 30sec, Post : 30sec
		Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager, NC-Titanium	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, NC-Titanium, Tive HD	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Tive HD(Android, iOS)	
EXTERNAL IN/OUT		
Audio	1 Input, 1 Output(Terminal Block)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC(Max. 32GB)	
ETC		
Operating Humidity	0~90% RH(Non-Condensing)	
Operating Temperature	-30~+50 °C	
Power Supply	PoE(IEEE802.3at, Class4 Only), 12VDC	
Power Consumption	470mA(22.6W)@PoE / 1.6A(19.2W)@12VDC	
Dimension	98.4(W)x124.3(H)x247.2(D)mm	
Net Weight	Approx. 1200g	
Ingress Protection	IP66	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

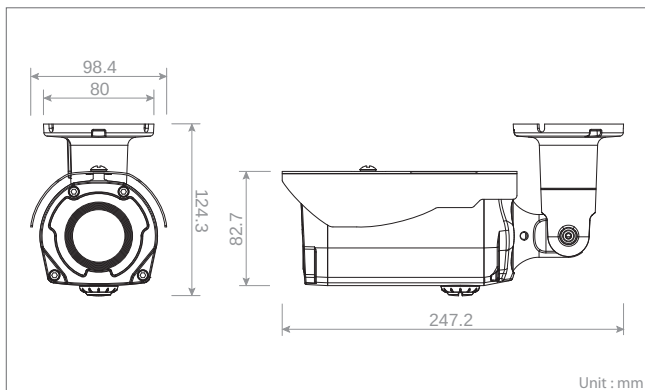
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HJB200(Junction Box)

Dimension





Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering
- Video Contents Analysis

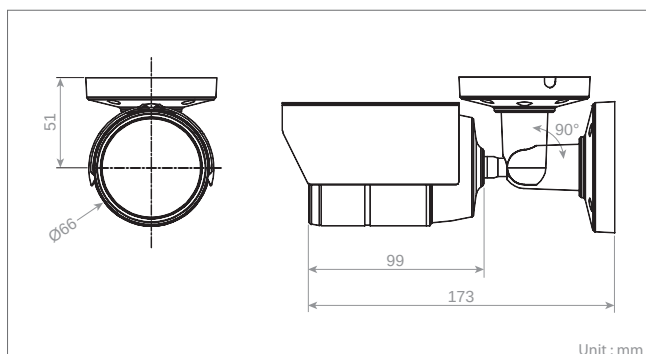
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HJB200(Junction Box)

Dimension



NUX-6313R

3MP IR Bullet Network Camera

Key Features

- 3M Resolution 25/30fps
- Fixed 3.7mm Lens
- True Day & Night
- D-WDR(ATR-EX)
- 24 IR LEDs for 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP67

Technical Specifications

Model	NUX-6313R	
IMAGE		
Lens	Fixed 3.7mm, F2.5	
Angle of View	90°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor
	Pixels	2065(H)x1553(V)
Min. Illumination	Color : 0.2Lux / BW : 0Lux@F2.5, 50IRE(IR LED On)	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	D-WDR(ATR-EX)	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	3DNR	
Digital Zoom	Yes(ROI)	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Aisle, Defog, HLC, S-LDC	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	24 IR LEDs
	Angle	76°(H)
	Distance	Up to 25m
Motorized Lens Control	-	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	2048x1536, 1920x1080, 1280x720/1024, 704x480/576, 640x480, 352x240/288, 320x240	
Frame Rate	Max. 25/30fps@3MP	
Streaming	25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Composite Out	-	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Video Contents Analysis	Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	-	
Audio	1 Input, 1 Output(Terminal Block)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC, SDXC	
RS485	-	
OSD Remote Control	-	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-20~+50℃	
Power Supply	PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption	120mA(5.7W)/PoE / 450mA(5.4W)@12VDC	
Dimension	66(Ø)x173(D)mm	
Net Weight	430g	
Ingress Protection	IP67	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MPEG4, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

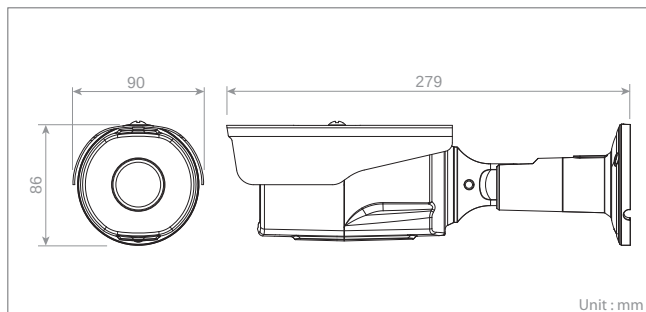
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HJB200(Junction Box)

Dimension



NUX-6377R

3M IR Motorized Bullet Network Camera

Key Features

- 3M Resolution 25/30fps
- Motorized Varifocal 2.8~12mm Lens(F1.4)
- True Day & Night
- D-WDR(ATR-EX)
- 35 IR LEDs for 40m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP66

Technical Specifications

Model		NUX-6377R	
IMAGE			
Lens		Motorized Varifocal 2.8~12mm, F1.4, DC Iris	
Angle of View		97~37°(H)	
Image Sensor	Type	1/2.8" SONY Starvis CMOS Sensor	
	Pixels	2048(H)x1536(V) .3.15M	
Min. Illumination		Color : 0.1Lux@F1.6, 50IRE / BW : 0Lux@F1.6, 50IRE(IR LED On)	
Scanning Mode		Progressive Scan	
Wide Dynamic Range		D-WDR(72dB)	
Day and Night Mode		True D/N(Auto, Day, Night)	
Noise Reduction		2DNR, 3DNR	
Digital Zoom		Yes(ROI)	
Exposure Control		Auto	
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor	
Back Light Compensation		Yes	
Image Effect		Flip, Mirror, Aisle, Defog, HLC, S-LDC	
Flicker Free Mode		50Hz, 60Hz	
Shutter Speed		Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	35 IR LEDs	
	Angle	76°(H)	
	Distance	Up to 40m	
Motorized Lens Control		Smart Focus, Manual	
VIDEO/AUDIO			
Compression		H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control		CVBR, VBR	
Resolution		2048x1536, 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate		Max. 25/30fps	
Streaming		25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Composite Out		-	
Audio Compression		G.711	
Audio Streaming		2 Way	
SYSTEM			
Video Contents Analysis		Tampering, Line Detector, Field Detector	
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone		8 Programmable Zone	
FTP Uploading		MJPEG	
Event Notification		E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert		User-Defined 3 Audio Files	
Login Authority		Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec	
	SD Record	Pre : 10sec, Post : 60sec	
Manual Trigger		4 Programmable Trigger	
Security		Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync		NTP Server, Synchronized Computer, Manual	
Software Reset		Restart, Reset, Factory Default	
Hardware Factory Reset		Yes	
Auto Recovery		Backup, Restore	
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode		Event, Continuous	
NETWORK			
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software		Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection		Live : 10 Users, Playback : 3 Users	
API Support		Open API, Onvif Compliance	
Mobile Support		Tive HD(Android, iOS)	
EXTERNAL IN/OUT			
Audio		1 Input, 1 Output(Terminal Block)	
Alarm		1 Input, 1 Output(Terminal Block)	
Ethernet		RJ-45(10/100Base-T)	
u-SD Card		SDHC, SDXC	
ETC			
Operating Humidity		0~90%RH(Non-Condensing)	
Operating Temperature		-20~+50 °C	
Power Supply		PoE(IEEE802.3 af Compliance, Class0), 12VDC	
Power Consumption		150mA(7.2W)@PoE 590mA(7W)@12VDC	
Dimension		90(W)x86(H)x279(D)mm	
Net Weight		Approx. 1030g	
Ingress Protection		IP66	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AiHM Event
- Event Buffering

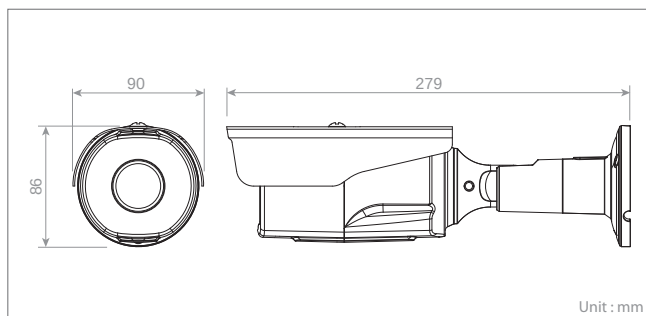
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HJB200(Junction Box)

Dimension



NUX-6587R

5M IR Motorized Bullet Network Camera

Key Features

- 5M Resolution 12.5/15fps
- Motorized Varifocal 3.6~10mm Lens
- True Day & Night
- D-WDR(ATR-EX)
- 35 IR LEDs for 40m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP66

Technical Specifications

Model	NUX-6587R	
IMAGE		
Lens	Motorized Varifocal 3.6~10mm, F1.5, DC Iris	
Angle of View	94~40°(H)	
Image Sensor	Type	1/1.8" SONY STARVIS CMOS Sensor
	Pixels	3096(H)x2080(V)
Min. Illumination	Color : 0.1Lux / BW : 0Lux@F1.5, 50IRE(IR LED On)	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	D-WDR(ATR-EX)	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	3DNR	
Digital Zoom	Yes(ROI)	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Aisle, Defog, HLC, S-LDC	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	35 IR LEDs
	Angle	76°(H)
	Distance	Up to 40m
Motorized Lens Control	Smart Focus, Manual	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	2592x1944, 2560x1600, 2560x1440, 2048x1536, 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 12.5/15fps	
Streaming	12.5/15fps(Triple Stream : H.264x2, MJPEGx1)	
Composite Out	-	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Video Contents Analysis	Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Audio	1 Input, 1 Output(Terminal Block)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC, SDXC	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-20~+50℃	
Power Supply	PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption	180mA(8.5W)@PoE / 680mA(8.2W)@12VDC	
Dimension	90(W)x86(H)x279(D)mm	
Net Weight	Approx. 1030g	
Ingress Protection	IP66	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Quad Stream(H.264x3, MJPEGx1)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering
- Video Contents Analysis

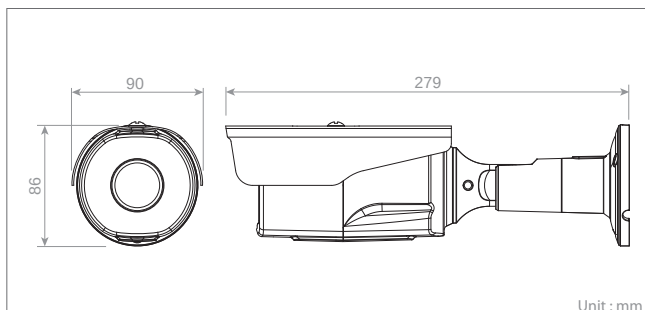
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HJB200(Junction Box)

Dimension



NUA-1811

4K IR Bullet Network Camera

Key Features

- 4K Resolution(3840x2160) 12.5/15fps
- Fixed 5.0mm Lens
- True Day & Night
- WDR(72dB)
- 34 IR LEDs for 20m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP66

Technical Specifications

Model	NUA-1811	
IMAGE		
Lens	Fixed 5.0mm F2.2	
Angle of View	67.5°(H)	
Image Sensor	Type	1/2.3" SONY STARVIS CMOS Sensor
	Pixels	3840(H)x2160(V)
Min. Illumination	3Lux(1/15s, Color), 0Lux(BW, IR LED On)	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	D-WDR(72dB)	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	3DNR	
Digital Zoom	Yes(ROI)	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor, Manual	
Back Light Compensation	Yes	
Image Effect	Defog	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	34 IR LEDs
	Angle	80°(H)
	Distance	Up to 20m
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	3840x2160, 1920x1080, 1280x1024, 1280x720/960, 704x480/576, 640x360/480, 320x240	
Frame Rate	12.5/15fps	
Streaming	Quad Stream(H.264x3, MJPEGx1)	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Video Contents Analysis	Tampering	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, Audio Alert	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	20 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Audio	1 Input, 1 Output(Terminal Block)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100/1000 Base-T)	
u-SD Card	SDHC, SDXC	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-20~+50℃	
Power Supply	PoE(IEEE802.3af Compliance), 12VDC	
Power Consumption	240mA(11.5W)@PoE / 900mA(10.8W)@12VDC	
Dimension	90(W)x86(H)x279(D)mm	
Net Weight	Approx. 850g(with Sunshield)	
Ingress Protection	IP66	

Specifications are subject to change without notice.

NETWORK PLASTIC DOME CAMERA

Model	Type	Image	Key SPEC							
			Codec	Sensor	Lens	Min. Illumination	AE	IR (Distance)	Ingress Protection	Page
NDH-52J1	2M Dome		H.265 H.264	1/2.8" CMOS	2.8~12mm Motorized	0Lux	TWDR	28EA (25m)	-	p.22
NDH-64J1	4M Dome		H.265 H.264	1/3" CMOS	2.8~12mm Motorized	0Lux	TWDR	28EA (25m)	-	p.23
NDX-6217R	2M Dome		H.264	1/2.9" CMOS	3.7mm Fixed	0Lux	DWDR	28EA (25m)	-	p.24
NDX-6277R	2M Dome		H.264	1/2.9" CMOS	2.8~12mm Motorized	0Lux	DWDR	28EA (25m)	-	p.25
NDX-2221/2231	2M Dome		H.264	1/2.8" CMOS	3.0~9.0mm Motorized	0.01Lux	TWDR	-	-	p.26
NDX-63E2/63E2A	3M Dome		H.264	1/2.8" CMOS	2.6mm Fixed	0.01Lux	DWDR	-	-	p.27
NDX-6317R	3M Dome		H.264	1/2.8" CMOS	3.7mm Fixed	0Lux	DWDR	28EA (25m)	-	p.28
NDX-6377R	3M Dome		H.264	1/2.8" CMOS	2.8~12mm Motorized	0Lux	DWDR	28EA (30m)	-	p.29
NDX-6587R	5M Dome		H.264	1/1.8" CMOS	3.6~10mm Motorized	0Lux	DWDR	28EA (30m)	-	p.30



Key Functions

- Smart Codec
- Intelligent Video Motion Detection, Intrusion Detector
- Quad Stream(H.264/H.265, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking

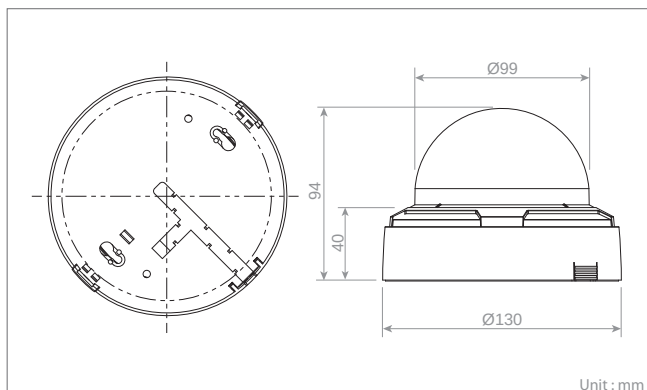
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB344(Wall Mount)

Dimension



NDH-52J1

2MP IR WDR Motorized Indoor Dome Network Camera

Key Features

- H.265, H.264 Support
- 2M Resolution
- Motorized Varifocal 2.8~12mm Lens
- True WDR
- True Day & Night
- 28 IR LEDs for 25m Coverage
- Micro SD Card(SDHC, SDXC)
- Alarm In/Out(1/1), Audio In/Out(1/1)
- PoE, 12VDC

Technical Specifications

Model	NDH-52J1	
IMAGE		
Lens	Motorized Varifocal 2.8~12mm, F1.6	
Angle of View	100~33°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor
	Pixels	1945(H)x1109(V)
Min. Illumination	Color : 0.1Lux@F1.6 / BW : 0Lux@F1.6	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	True WDR	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	2DNR, 3DNR	
Digital Zoom	Yes(ROI)	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor, Manual	
Metering Mode	Spot(BLC), Center, Average, Left, Right	
Image Effect	Flip, Mirror, Defog	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	28 IR LEDs
	Angle	80°(H)
	Distance	Up to 25m
Motorized Lens Control	Smart Focus, Manual	
VIDEO/AUDIO		
Compression	H.264/H.265(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CBR, CVBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240	
Frame Rate	Max. 25/30fps	
Streaming	Quad Stream : H.264/H.265x3, MJPEGx1	
Composite Out	Yes	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Video Contents Analysis	Tampering, iVMD, Intrusion Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, Audio Alert	
Audio Alert	User Defined 3 Audio File	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	Yes	
Audio	1 Input, 1 Output(Terminal Block)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC, SDXC	
ETC		
Operating Humidity	0~90% RH(Non-Condensing)	
Operating Temperature	-10~+50 °C	
Power Supply	PoE(IEEE802.3af Compliance, Class0)/12VDC	
Power Consumption	190mA(8.2W)@PoE / 680mA(7.4W)@12VDC	
Dimension	130(Ø)x94(H)mm	
Net Weight	400g	

Specifications are subject to change without notice.



Key Functions

- Smart Codec
- Intelligent Video Motion Detection, Intrusion Detector
- Quad Stream(H.264/H.265, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking

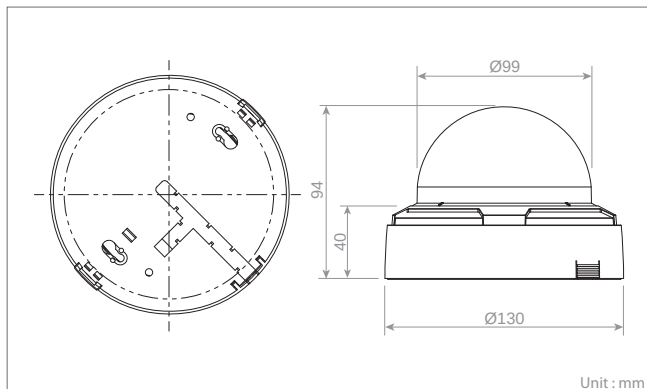
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB344(Wall Mount)

Dimension



NDH-64J1

4MP IR WDR Motorized Indoor Dome Network Camera

Key Features

- H.265, H.264 Support
- 4M Resolution
- Motorized Varifocal 2.8~12mm Lens
- True WDR
- True Day & Night
- 28 IR LEDs for 25m Coverage
- Alarm In/Out(1/1), Audio In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC

Technical Specifications

Model		NDH-64J1	
IMAGE			
Lens		Motorized Varifocal 2.8~12mm, F1.6	
Angle of View		97~31°(H)	
Image Sensor	Type	1/3" CMOS Sensor	
	Pixels	2688(H)x1520(V)	
Min. Illumination		Color : 0.1Lux@F1.6 / BW : 0Lux@F1.6	
Scanning Mode		Progressive Scan	
Wide Dynamic Range		True WDR	
Day and Night Mode		True D/N(Auto, Day, Night)	
Noise Reduction		2DNR, 3DNR	
Digital Zoom		Yes(ROI)	
Exposure Control		Auto	
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor, Manual	
Metering Mode		Spot(BLC), Center, Average, Left, Right	
Image Effect		Flip, Mirror, Defog	
Flicker Free Mode		50Hz, 60Hz	
Shutter Speed		Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	28 IR LEDs	
	Angle	80°(H)	
	Distance	Up to 25m	
Motorized Lens Control		Smart Focus, Manual	
VIDEO/AUDIO			
Compression		H.264/H.265(Baseline, Main, High Profile), MJPEG	
Bitrate Control		CBR, CVBR	
Resolution		2592x1520, 2048x1520, 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240	
Frame Rate		Max. 25/30fps	
Streaming		Quad Stream : H.264/H.265x3, MJPEGx1	
Composite Out		Yes	
Audio Compression		G.711	
Audio Streaming		2 Way	
SYSTEM			
Video Contents Analysis		Tampering, iVMD, Intrusion Detector	
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone		8 Programmable Zone	
FTP Uploading		MJPEG	
Event Notification		E-mail, FTP, Notification Server, XML Notification, Audio Alert	
Audio Alert		User Defined 3 Audio File	
Login Authority		Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec	
	SD Record	Pre : 10sec, Post : 60sec	
Manual Trigger		4 Programmable Trigger	
Security		Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync		NTP Server, Synchronized Computer, Manual	
Software Reset		Restart, Reset, Factory Default	
Hardware Factory Reset		Yes	
Auto Recovery		Backup, Restore	
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode		Event, Continuous	
NETWORK			
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software		Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection		Live : 10 Users, Playback : 3 Users	
API Support		Open API, Onvif Compliance	
Mobile Support		Android, iOS	
EXTERNAL IN/OUT			
Video Composite Out		Yes	
Audio		1 Input, 1 Output(Terminal Block)	
Alarm		1 Input, 1 Output(Terminal Block)	
Ethernet		RJ-45(10/100Base-T)	
u-SD Card		SDHC, SDXC	
ETC			
Operating Humidity		0~90% RH(Non-Condensing)	
Operating Temperature		-10~+50℃	
Power Supply		PoE(IEEE802.3af Compliance, Class0)/12VDC	
Power Consumption		190mA(8.5W)@PoE / 710mA(7.6W)@12VDC	
Dimension		130(Ø)x94(H)mm	
Net Weight		Approx 400g	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Quad Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering
- Video Contents Analysis

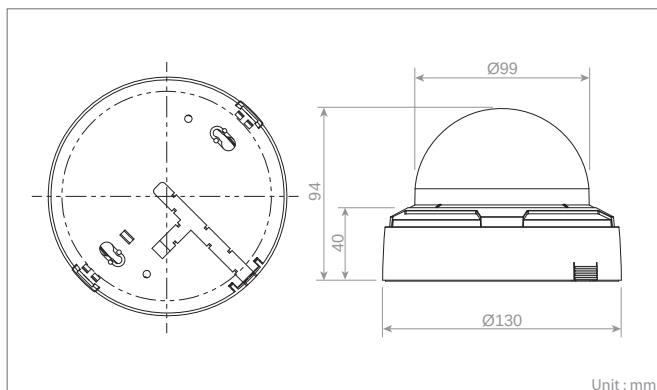
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB344(Wall Mount)

Dimension



NDX-6217R

2MP IR Indoor Dome Network Camera

Key Features

- 2MP Resolution, 25/30fps
- Fixed 3.7mm Lens
- True Day & Night
- D-WDR(72dB)
- 28 IR LEDs for 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC

Technical Specifications

Model	NDX-6217R	
IMAGE		
Lens	Fixed 3.7mm, F2.5	
Angle of View	90.0°(H)	
Image Sensor	Type	1/2.9" SONY Exmor CMOS Sensor
	Pixels	1920(H)x1080(V) 2.07M
Min. Illumination	Color : 0.3Lux@F2.5 / BW : 0Lux@F2.5	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	D-WDR(72dB)	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	2DNR, 3DNR	
Digital Zoom	Yes(ROI)	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor, Manual	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Aisle, Defog, HLC, S-LDC	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
	Quantity	28 IR LEDs
IR Illuminator	Angle	80°(H)
	Distance	Up to 25m
Motorized Lens Control	-	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 25/30fps	
Streaming	25/30fps(Quad Stream : H.264x3, MJPEGx1)	
Composite Out	-	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Video Contents Analysis	Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	-	
Audio	1 Input, 1 Output(Terminal Block)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC, SDXC	
RS485	-	
OSD Remote Control	-	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-10~+50 °C	
Power Supply	PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption	120mA(5.7W)@PoE / 450mA(5.4W)@12VDC	
Dimension	130(Ø)x94(H)mm	
Net Weight	Approx. 375g	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Quad Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering
- Video Contents Analysis

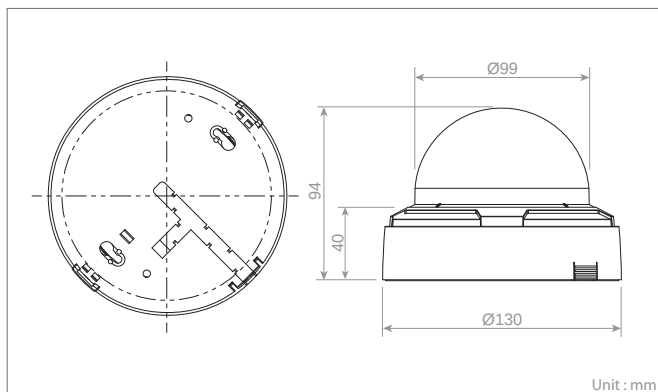
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB344(Wall Mount)

Dimension



NDX-6277R

2MP IR Indoor Dome Network Camera

Key Features

- 2MP Resolution, 25/30fps
- Motorized Varifocal 2.8~12mm Lens
- True Day & Night
- D-WDR(72dB)
- 28 IR LEDs for 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC

Technical Specifications

Model		NDX-6277R
IMAGE		
Lens		Motorized Varifocal 2.8~12mm, F1.4, DC IRIS
Angle of View		105~37°(H)
Image Sensor	Type	1/2.9" SONY Exmor CMOS Sensor
	Pixels	1920(H)x1080(V) 2.07M
Min. Illumination		Color : 0.1Lux@F1.4 / BW : 0Lux@F1.4
Scanning Mode		Progressive Scan
Wide Dynamic Range		D-WDR(72dB)
Day and Night Mode		True D/N(Auto, Day, Night)
Noise Reduction		2DNR, 3DNR
Digital Zoom		Yes(ROI)
Exposure Control		Auto
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor, Manual
Back Light Compensation		Yes
Image Effect		Flip, Mirror, Aisle, Defog, HLC, S-LDC
Flicker Free Mode		50Hz, 60Hz
Shutter Speed		Auto(1/10,000~1sec), Manual
IR Illuminator	Quantity	28 IR LEDs
	Angle	80°(H)
	Distance	Up to 25m
Motorized Lens Control		Smart Focus, Manual
VIDEO/AUDIO		
Compression		H.264(Baseline, Main, High Profile), MJPEG
Bitrate Control		CVBR, VBR
Resolution		1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240
Frame Rate		Max. 25/30fps
Streaming		25/30fps(Quad Stream : H.264x3, MJPEGx1)
Composite Out		-
Audio Compression		G.711
Audio Streaming		2 Way
SYSTEM		
Video Contents Analysis		Tampering, Line Detector, Field Detector
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)
Privacy Mask Zone		8 Programmable Zone
FTP Uploading		MJPEG
Event Notification		E-mail, FTP, Notification Server, XML Notification, AIHM
Audio Alert		User-Defined 3 Audio Files
Login Authority		Administrator, Operator, Guest
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger		4 Programmable Trigger
Security		Multi User Authority, IP Filtering, HTTPS, SSL
Network Time Sync		NTP Server, Synchronized Computer, Manual
Software Reset		Restart, Reset, Factory Default
Hardware Factory Reset		Yes
Auto Recovery		Backup, Restore
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager
SD Recording Mode		Event, Continuous
NETWORK		
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour
Client Software		Web, SmartManager, Client S/W, Mobile S/W
Max. User Connection		Live : 10 Users, Playback : 3 Users
API Support		Open API, Onvif Compliance
Mobile Support		Android, iOS
EXTERNAL IN/OUT		
Video Composite Out		-
Audio		1 Input, 1 Output(Terminal Block)
Alarm		1 Input, 1 Output(Terminal Block)
Ethernet		RJ-45(10/100Base-T)
u-SD Card		SDHC, SDXC
RS485		-
OSD Remote Control		-
ETC		
Operating Humidity		0~90%RH(Non-Condensing)
Operating Temperature		-10~+50℃
Power Supply		PoE(IEEE802.3af Compliance, Class0), 12VDC
Power Consumption		150mA(7.2W)@PoE / 590mA(7W)@12VDC
Dimension		130(Ø)x94(H)mm
Net Weight		Approx. 400g
Ingress Protection		-

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

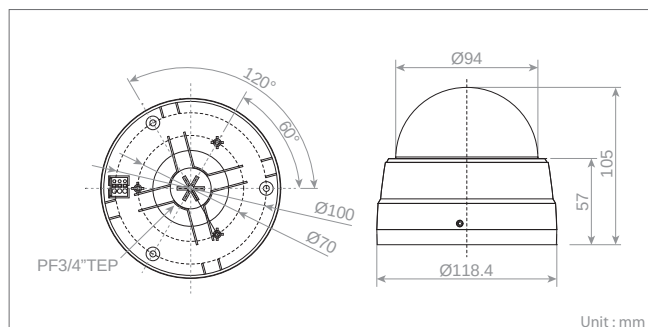
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB344(Wall Bracket)

Dimension



NDX-2221/2231

2MP True WDR Indoor Dome Network Camera

Key Features

- 2MP Resolution, 50/60fps
- Varifocal 3~9mm(F1.2), Motorized Varifocal 3~9mm(F1.2 NDX-2231)
- True WDR(120dB)
- True Day & Night
- Audio In/Out(1/1), Alarm In/Out(1/1)
- SD Card Up to 32GB
- PoE, 12VDC

Technical Specifications

Model	NDX-2221		NDX-2231
IMAGE			
Lens	Varifocal 3.0~9.0mm, F1.2, DC IRIS		Motorized Varifocal 3.0~9.0mm, F1.2, DC IRIS
Angle of View	100~40°(H)		
Image Sensor	Type	1/2.8" SONY Exmor CMOS Sensor	
	Pixels	1944(H)x1224(V)	
Min. Illumination	Color : 0.4 Lux / BW : 0.01 Lux@F1.2, 50IRE		
Scanning Mode	Progressive Scan		
Wide Dynamic Range	True WDR(120dB)		
Day & Night Mode	True Day & Night(Auto, Day, Night)		
Noise Reduction	3DNR		
Digital Zoom	16X		
Exposure Control	Auto, Hold Current		
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor		
Back Light Compensation	Yes		
Image Effect	Flip, Mirror, Aisle		
Flicker Free Mode	50Hz, 60Hz		
Shutter Speed	Auto(1/10,000~10sec), Manual		
Motorized Lens Control	-		Yes
VIDEO/AUDIO			
Compression	H.264(Baseline, Main, High Profile), MJPEG		
Bitrate Control	CVBR, VBR		
Resolution	1920x1080, 1280x720/960/1024, 1024x768, 704x480/576, 640x360/480, 320x240		
Frame Rate	Max. 50/60fps@Full-HD		
Streaming	50/60fps(Dual Stream : H.264x1, MJPEGx1), 25/30fps(Triple Stream : H.264x2, MJPEGx1)		
Audio Compression	G.711		
Audio Streaming	2 Way		
SYSTEM			
Video Contents Analysis	DIS, Defog, Face Detection, Tampering, Line Detector, Field Detector		
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)		
Privacy Mask Zone	8 Programmable Zone		
FTP Uploading	MJPEG		
Event Notification	E-mail, FTP, Notification Server, XML Notification, Audio Alert, AIHM		
Audio Alert	User-Defined 3 Audio files		
Login Authority	Administrator, Operator, Guest		
Event Buffering	FTP	Pre : 30sec, Post : 30sec	
	SD Record	Pre : 10sec, Post : 60sec	
Manual Trigger	4 Programmable Trigger		
Security	Multi User Authority, IP Filtering, HTTPS, SSL		
Network Time Sync	NTP Server, Synchronized Computer, Manual		
Software Reset	Restart, Reset, Factory Default		
Hardware Factory Reset	Yes		
Auto Recovery	Backup, Restore		
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager, NC-Titanium		
SD Recording Mode	Event, Continuous		
NETWORK			
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour		
Client Software	Web, SmartManager, NC-Titanium, Tive HD		
Max. User Connection	Live : 10 Users, Playback : 3 Users		
API Support	Open API, Onvif Compliance		
Mobile Support	Android, iOS		
EXTERNAL IN/OUT			
Audio	1 Input, 1 Output(Terminal Block)		
Alarm	1 Input, 1 Output(Terminal Block)		
Ethernet	RJ-45(10/100Base-T)		
u-SD Card	SDHC(Max. 32GB)		
ETC			
Operating Humidity	0~90%RH(Non-Condensing)		
Operating Temperature	-10~+50 °C		
Power Supply	PoE(IEEE802.3 af Compliance, Class0), 12VDC		
Power Consumption	100mA(4.7W)@PoE 420mA(4.0W)@12VDC	110mA(5.0W)@PoE 450mA(4.4W)@12VDC	
Dimension	118.4(Ø)x105(H)mm		
Net Weight	Approx. 320g		

Specifications are subject to change without notice.



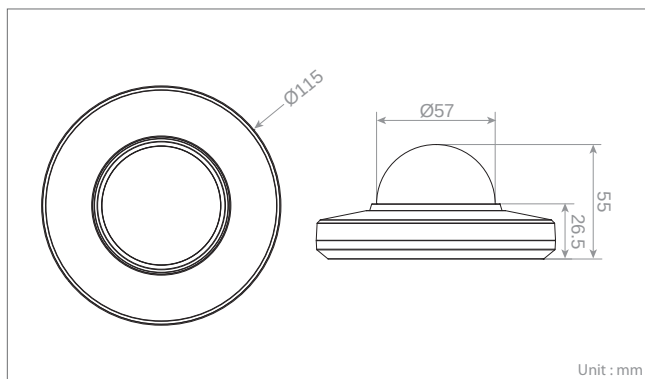
Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- Video Contents Analysis

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



NDX-63E2/63E2A

3MP Indoor Micro Dome Network Camera

Key Features

- Stylish Compact Design
- 3MP Resolution 25/30fps
- Fixed 2.6mm Wide Angle Lens
- WDR(ATR-EX)
- PoE

Technical Specifications

Model	NDX-63E2		NDX-63E2A
IMAGE			
Lens	Fixed 2.6mm, F2.0		
Angle of View	107°(H)		
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor	
	Pixels	2048(H)x1536(V), 3.21M Pixels	
Min. Illumination	Color : 0.2Lux		
Scanning Mode	Progressive Scan		
Wide Dynamic Range	Yes(72dB)		
Day and Night Mode	Digital D/N(Auto, Day, Night)		
Noise Reduction	2DNR, 3DNR		
Digital Zoom	Yes(ROI)		
Exposure Control	Auto		
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor, Manual		
Back Light Compensation	BLC, HLC		
Image Effect	Flip, Mirror, Aisle, Defog, S-LDC		
Flicker Free Mode	50Hz, 60Hz		
Shutter Speed	Auto(1/10,000~1sec), Manual		
VIDEO/AUDIO			
Compression	H.264(Baseline, Main, High Profile), MJPEG		
Bitrate Control	CVBR, VBR		
Resolution	2048x1536, 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240		
Frame Rate	Max. 25/30fps		
Streaming	25/30fps(Triple Stream : H.264x2, MJPEGx1)		
SYSTEM			
Video Contents Analysis	Tampering, Line Detector, Field Detector		
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)		
Privacy Mask Zone	8 Programmable Zone		
FTP Uploading	MJPEG		
Event Notification	E-mail, FTP, Notification Server, XML Notification, AIHM		
Audio Alert	-	User Defined 3 Audio Files	
Event Buffering	FTP	-	Pre : 30sec, Post : 30sec
	SD Record	-	Pre : 10sec, Post : 60sec
Login Authority	Administrator, Operator, Guest		
Manual Trigger	4 Programmable Trigger		
Security	Multi User Authority, IP Filtering, HTTPS, SSL		
Network Time Sync	NTP Server, Synchronized Computer, Manual		
Software Reset	Restart, Reset, Factory Default		
Hardware Factory Reset	Yes		
Auto Recovery	Backup, Restore		
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager		
NETWORK			
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour		
Client Software	Web, SmartManager, Client S/W, Mobile S/W		
Max. User Connection	Live : 10 Users, Playback : 3 Users		
API Support	Open API, Onvif Compliance		
Mobile Support	Android, iOS		
EXTERNAL IN/OUT			
Ethernet	RJ-45(10/100Base-T)		
Audio	-	1 Input, 1 Output(5P CONN)	
Alarm	-	1 Input, 1 Output(5P CONN)	
u-SD Card	-	SDHC/SDXC	
ETC			
Operating Humidity	0~90%RH(Non-Condensing)		
Operating Temperature	-10~+45 °C		
Power Supply	PoE(IEEE802.3af Compliance, Class0) / 12VDC		
Power Consumption	83mA, 4.0W@PoE		
	300mA, 3.6W@12VDC		
Dimension	115(Ø)x55(H)mm		
Net Weight	235g		

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MPEG4, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering
- Video Contents Analysis

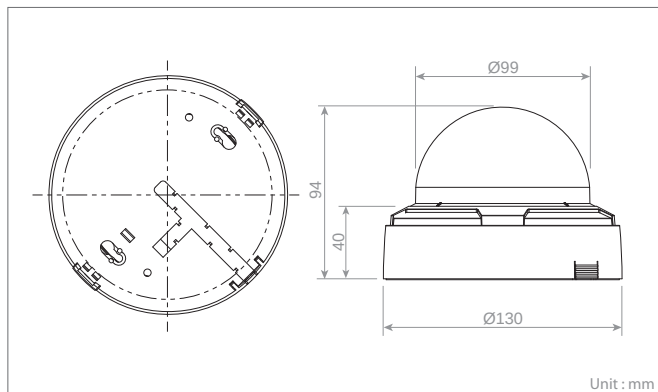
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB344(Wall Mount)

Dimension



NDX-6317R

3MP IR Fixed Indoor Dome Network Camera

Key Features

- 3MP(2048x1536) Resolution 25/30fps
- Fixed 3.7mm Lens
- True Day & Night
- D-WDR(72dB)
- 28 IR LEDs for 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC

Technical Specifications

Model		NDX-6317R
IMAGE		
Lens		Fixed 3.7mm, F2.5
Angle of View		85°(H)
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor
	Pixels	2048(H)x1536(V) 3.15M
Min. Illumination		Color : 0.2Lux@F2.5 / BW : 0Lux@F2.5
Scanning Mode		Progressive Scan
Wide Dynamic Range		D-WDR(72dB)
Day and Night Mode		True D/N(Auto, Day, Night)
Noise Reduction		2DNR, 3DNR
Digital Zoom		Yes(ROI)
Exposure Control		Auto
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor, Manual
Back Light Compensation		Yes
Image Effect		Flip, Mirror, Aisle, Defog, HLC, S-LDC
Flicker Free Mode		50Hz, 60Hz
Shutter Speed		Auto(1/10,000~1sec), Manual
IR Illuminator	Quantity	28 IR LEDs
	Angle	80°(H)
	Distance	Up to 25m
Motorized Lens Control		-
VIDEO/AUDIO		
Compression		H.264(Baseline, Main, High Profile), MJPEG
Bitrate Control		CVBR, VBR
Resolution		2048x1536, 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240
Frame Rate		Max. 25/30fps
Streaming		25/30fps(Triple Stream : H.264x2, MJPEGx1)
Composite Out		-
Audio Compression		G.711
Audio Streaming		2 Way
SYSTEM		
Video Contents Analysis		Tampering, Line Detector, Field Detector
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)
Privacy Mask Zone		8 Programmable Zone
FTP Uploading		MJPEG
Event Notification		E-mail, FTP, Notification Server, XML Notification, AIHM
Audio Alert		User-Defined 3 Audio Files
Login Authority		Administrator, Operator, Guest
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger		4 Programmable Trigger
Security		Multi User Authority, IP Filtering, HTTPS, SSL
Network Time Sync		NTP Server, Synchronized Computer, Manual
Software Reset		Restart, Reset, Factory Default
Hardware Factory Reset		Yes
Auto Recovery		Backup, Restore
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager
SD Recording Mode		Event, Continuous
NETWORK		
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour
Client Software		Web, SmartManager, Client S/W, Mobile S/W
Max. User Connection		Live : 10 Users, Playback : 3 Users
API Support		Open API, Onvif Compliance
Mobile Support		Android, iOS
EXTERNAL IN/OUT		
Video Composite Out		-
Audio		1 Input, 1 Output(Terminal Block)
Alarm		1 Input, 1 Output(Terminal Block)
Ethernet		RJ-45(10/100Base-T)
u-SD Card		SDHC, SDXC
RS485		-
OSD Remote Control		-
ETC		
Operating Humidity		0~90%RH(Non-Condensing)
Operating Temperature		-10~+50 °C
Power Supply		PoE(IEEE802.3af Compliance, Class0), 12VDC
Power Consumption		120mA(5.7W)@PoE / 450mA(5.4W)@12VDC
Dimension		130(Ø)x94(H)mm
Net Weight		Approx. 375g
Ingress Protection		-

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MPEG4, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering
- Video Contents Analysis

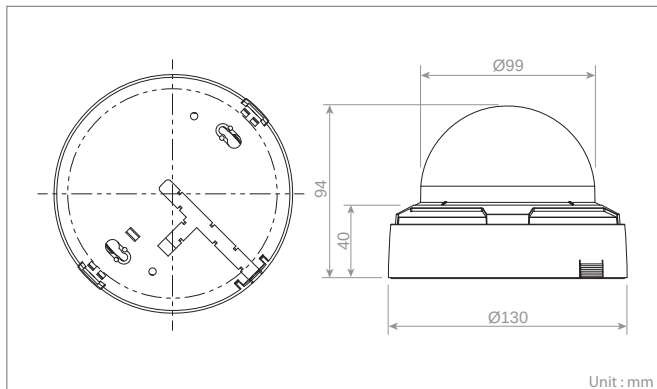
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB344(Wall Mount)

Dimension



NDX-6377R

3MP IR Motorized Indoor Dome Network Camera

Key Features

- 3MP(2048x1536) Resolution 25/30fps
- Motorized Varifocal 2.8~12mm Lens
- True Day & Night
- D-WDR(72dB)
- 28 IR LEDs for 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC

Technical Specifications

Model	NDX-6377R	
IMAGE		
Lens	Motorized Varifocal 2.8~12mm, F1.4, DC Iris	
Angle of View	88~35°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor
	Pixels	2065(H)x1553(V)
Min. Illumination	Color : 0.1Lux@F1.4 / BW : 0Lux@F1.4(IR LED On)	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	D-WDR(72dB)	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	2DNR, 3DNR	
Digital Zoom	Yes(ROI)	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor, Manual	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Aisle, Defog, HLC, S-LDC	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	28 IR LEDs
	Angle	80°(H)
	Distance	Up to 25m
Motorized Lens Control	Smart Focus, Manual	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	2048x1536, 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 25/30fps	
Streaming	25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Composite Out	-	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Video Contents Analysis	Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	-	
Audio	1 Input, 1 Output(Terminal Block)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC, SDXC	
RS485	-	
OSD Remote Control	-	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-10~+50℃	
Power Supply	PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption	150mA(7.2W)@PoE / 590mA(7W)@12VDC	
Dimension	130(Ø)x94(H)mm	
Net Weight	Approx. 400g	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AiHM Event
- Event Buffering

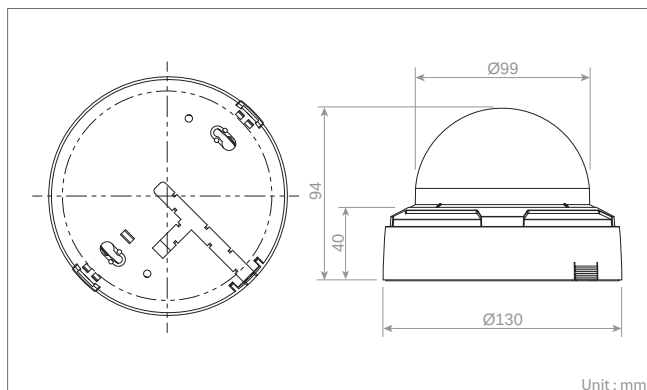
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB344(Wall Mount)

Dimension



NDX-6587R

5M IR Motorized Indoor Dome Network Camera

Key Features

- 5M(2592x1944) 12.5/15fps
- Motorized Varifocal 3.6~10mm Lens
- D-WDR(ATR-EX)
- True Day & Night
- 28 IR LEDs for 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC

Technical Specifications

Model		NDX-6587R
IMAGE		
Lens		Motorized Varifocal 3.6~10mm, F1.5, DC Iris
Angle of View		94~40°(H)
Image Sensor	Type	1/1.8" SONY STARVIS CMOS Sensor
	Pixels	3096(H)x2080(V)
Min. Illumination		Color : 0.1Lux / BW : 0Lux@F1.5, 50IRE(IR LED On)
Scanning Mode		Progressive Scan
Wide Dynamic Range		D-WDR(ATR-EX)
Day and Night Mode		True D/N(Auto, Day, Night)
Noise Reduction		3DNR
Digital Zoom		Yes(ROI)
Exposure Control		Auto
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor, Manual
Back Light Compensation		Yes
Image Effect		Flip, Mirror, Aisle, Defog, HLC, S-LDC
Flicker Free Mode		50Hz, 60Hz
Shutter Speed		Auto(1/10,000~1sec), Manual
IR Illuminator	Quantity	28 IR LEDs
	Angle	76°(H)
	Distance	Up to 25m
Motorized Lens Control		Smart Focus, Manual
VIDEO/AUDIO		
Compression		H.264(Baseline, Main, High Profile), MJPEG
Bitrate Control		CVBR, VBR
Resolution		2592x1944, 2560x1600, 2560x1440, 2048x1536, 1944x1944, 1440x1440, 1280x1024/960, 1024x1024/768, 720x720, 704x576, 640x480, 480x480
Frame Rate		12.5/15fps(Triple Stream : H.264x2, MJPEGx1)
Streaming		12.5/15fps(Triple Stream : H.264x2, MJPEGx1)
Composite Out		-
Audio Compression		G.711
Audio Streaming		2 Way
SYSTEM		
Video Contents Analysis		Tampering, Line Detector, Field Detector
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)
Privacy Mask Zone		8 Programmable Zone
FTP Uploading		MJPEG
Event Notification		E-mail, FTP, Notification Server, XML Notification, AIHM
Audio Alert		User-Defined 3 Audio Files
Login Authority		Administrator, Operator, Guest
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger		4 Programmable Trigger
Security		Multi User Authority, IP Filtering, HTTPS, SSL
Network Time Sync		NTP Server, Synchronized Computer, Manual
Software Reset		Restart, Reset, Factory Default
Hardware Factory Reset		Yes
Auto Recovery		Backup, Restore
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager
SD Recording Mode		Event, Continuous
NETWORK		
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour
Client Software		Web, SmartManager, Client S/W, Mobile S/W
Max. User Connection		Live : 10 Users, Playback : 3 Users
API Support		Open API, Onvif Compliance
Mobile Support		Android, iOS
EXTERNAL IN/OUT		
Video Composite Out		-
Audio		1 Input, 1 Output(Terminal Block)
Alarm		1 Input, 1 Output(Terminal Block)
Ethernet		RJ-45(10/100Base-T)
u-SD Card		SDHC, SDXC
RS485		-
OSD Remote Control		-
ETC		
Operating Humidity		0~90%RH(Non-Condensing)
Operating Temperature		-10~+50℃
Power Supply		PoE(IEEE802.3 af Compliance, Class0), 12VDC
Power Consumption		180mA(8.5W)@PoE / 680mA(8.2W)@12VDC
Dimension		130(Ø)x94(H)mm
Net Weight		Approx. 400g

Specifications are subject to change without notice.

NETWORK VP DOME, TURRET CAMERA

Model	Type	Image	Key SPEC							
			Codec	Sensor	Lens	Min. Illumination	AE	IR (Distance)	Ingress Protection	Page
NVH-52J1	2M VP Dome		H.265 H.264	1/2.8" CMOS	2.8~12mm Motorized	0Lux	TWDR	28EA (25m)	IP66	p.32
NVH-64J1	4M VP Dome		H.265 H.264	1/3" CMOS	2.8~12mm Motorized	0Lux	TWDR	28EA (25m)	IP66	p.33
NVX-6217R	2M VP Dome		H.264	1/2.9" CMOS	3.7mm Fixed	0Lux	DWDR	28EA (25m)	IP66	p.34
NVX-6277R	2M VP Dome		H.264	1/2.9" CMOS	2.8~12mm Motorized	0Lux	DWDR	28EA (25m)	IP66	p.35
NVX-2223R/ 2233R	2M VP Dome		H.264	1/2.8" CMOS	3.0~9.0mm Motorized	0Lux	TWDR	24EA (20m)	IP66	p.36
NVX-6317R	3M VP Dome		H.264	1/2.8" CMOS	3.7mm Fixed	0Lux	DWDR	28EA (25m)	IP66	p.37
NVX-6377R	3M VP Dome		H.264	1/2.8" CMOS	2.8~12mm Motorized	0Lux	DWDR	28EA (25m)	IP66	p.38
NVX-6587R	5M VP Dome		H.264	1/1.8" CMOS	3.6~10mm Motorized	0Lux	DWDR	28EA (25m)	IP66	p.39
NTH-1231	2M VP Dome		H.265 H.264	1/2.9" CMOS	3.6mm Fixed	0Lux	DWDR	15EA (30m)	IP66	p.40
NTH-12J2	2M Turret		H.265 H.264	1/2.9" CMOS	2.8~12mm Motorized	0Lux	DWDR	30EA (30m)	IP66	p.41
NTH-2431	4M VP Turret		H.265 H.264	1/3" CMOS	3.6mm Fixed	0Lux	DWDR	15EA (30m)	IP66	p.42
NTH-24J2	4M VP Turret		H.265 H.264	1/3" CMOS	2.8~12mm Motorized	0Lux	DWDR	30EA (30m)	IP66	p.43
NVX-2295R	2M PT Turret		H.264	1/2.8" CMOS	2.8~12mm Motorized	0Lux	TWDR	30EA (25m)	IP66	p.44
NVX-6375R	3M PT Turret		H.264	1/2.8" CMOS	2.8~12mm Motorized	0.01Lux	DWDR	30EA (25m)	IP66	p.45
NVX-6585R	5M PT Turret		H.264	1/1.8" CMOS	3.6~10mm Motorized	0Lux	DWDR	30EA (25m)	IP66	p.46



Key Functions

- Smart Codec
- Intelligent Video Motion Detection, Intrusion Detector
- Quad Stream(H.264/H.265, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking

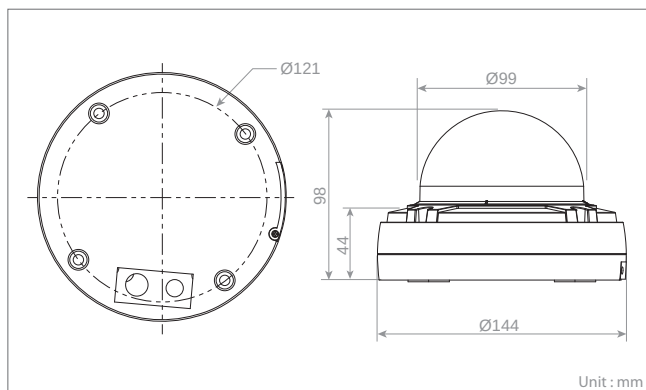
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB243(Wall Mount)
- HVPWB2(Wall/Ceiling Mount)
- HVPCB2(Ceiling Mount)
- HDA501(Junction Box)

Dimension



NVH-52J1

2MP IR WDR Motorized Vandal Dome Network Camera

Key Features

- H.265, H.264 Support
- 2M Resolution
- Motorized Varifocal 2.8~12mm Lens
- True WDR
- True Day & Night
- 28 IR LEDs for 25m Coverage
- Alarm In/Out(1/1), Audio In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP66

Technical Specifications

Model		NVH-52J1	
IMAGE			
Lens		Motorized Varifocal 2.8~12mm, F1.6	
Angle of View		100~33°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor	
	Pixels	1945(H)x1109(V)	
Min. Illumination		Color : 0.1Lux@F1.6 / BW : 0Lux@F1.6(IR LED On)	
Scanning Mode		Progressive Scan	
Wide Dynamic Range		True WDR	
Day and Night Mode		True D/N(Auto, Day, Night)	
Noise Reduction		2DNR, 3DNR	
Digital Zoom		Yes(ROI)	
Exposure Control		Auto	
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor, Manual	
Metering Mode		Spot(BLC), Center, Average, Left, Right	
Image Effect		Flip, Mirror, Defog	
Flicker Free Mode		50Hz, 60Hz	
Shutter Speed		Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	28 IR LEDs	
	Angle	80°(H)	
	Distance	Up to 25m	
Motorized Lens Control		Smart Focus, Manual	
VIDEO/AUDIO			
Compression		H.264/H.265(Baseline, Main, High Profile), MJPEG	
Bitrate Control		CBR, CVBR	
Resolution		1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240	
Frame Rate		Max. 25/30fps	
Streaming		Quad Stream : H.264/H.265x3, MJPEGx1	
Composite Out		Yes	
Audio Compression		G.711	
Audio Streaming		2 Way	
SYSTEM			
Video Contents Analysis		Tampering, iVMD, Intrusion Detector	
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone		8 Programmable Zone	
FTP Uploading		MJPEG	
Event Notification		E-mail, FTP, Notification Server, XML Notification, Audio Alert	
Audio Alert		User Defined 3 Audio File	
Login Authority		Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec	
	SD Record	Pre : 10sec, Post : 60sec	
Manual Trigger		4 Programmable Trigger	
Security		Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync		NTP Server, Synchronized Computer, Manual	
Software Reset		Restart, Reset, Factory Default	
Hardware Factory Reset		Yes	
Auto Recovery		Backup, Restore	
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode		Event, Continuous	
NETWORK			
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software		Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection		Live : 10 Users, Playback : 3 Users	
API Support		Open API, Onvif Compliance	
Mobile Support		Android, iOS	
EXTERNAL IN/OUT			
Video Composite Out		Yes	
Audio		1 Input, 1 Output(Terminal Block)	
Alarm		1 Input, 1 Output(Terminal Block)	
Ethernet		RJ-45(10/100Base-T)	
u-SD Card		SDHC, SDXC	
ETC			
Operating Humidity		0~90% RH(Non-Condensing)	
Operating Temperature		-20~+50℃	
Power Supply		PoE(IEEE802.3af Compliance, Class0)/12VDC	
Power Consumption		190mA(8.2W)@PoE / 680mA(7.4W)@12VDC	
Dimension		144(Ø)x98(H)mm	
Net Weight		Approx. 810g	
Ingress Protection		IP66	

Specifications are subject to change without notice.



Key Functions

- Smart Codec
- Intelligent Video Motion Detection, Intrusion Detector
- Quad Stream(H.264/H.265, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking

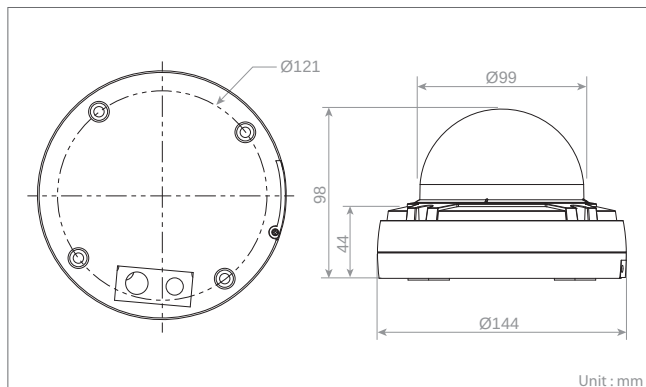
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB243(Wall Mount)
- HVPWB2(Wall/Ceiling Mount)
- HVPCB2(Ceiling Mount)
- HDA501(Junction Box)

Dimension



NVH-64J1

4MP IR WDR Motorized Vandal Dome Network Camera

Key Features

- H.265, H.264 Support
- 4M Resolution
- Motorized Varifocal 2.8~12mm Lens
- True WDR
- True Day & Night
- 28 IR LEDs for 25m Coverage
- Alarm In/Out(1/1), Audio In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP66

Technical Specifications

Model	NVH-64J1	
IMAGE		
Lens	Motorized Varifocal 2.8~12mm, F1.6	
Angle of View	97~31°(H)	
Image Sensor	Type	1/3" CMOS Sensor
	Pixels	2688(H)x1520(V)
Min. Illumination	Color : 0.1Lux@F1.6 / BW : 0Lux@F1.6(IR LED On)	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	True WDR	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	2DNR, 3DNR	
Digital Zoom	Yes(ROI)	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor, Manual	
Metering Mode	Spot(BLC), Center, Average, Left, Right	
Image Effect	Flip, Mirror, Defog	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	28 IR LEDs
	Angle	80°(H)
	Distance	Up to 25m
Motorized Lens Control	Smart Focus, Manual	
VIDEO/AUDIO		
Compression	H.264/H.265(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CBR, CVBR	
Resolution	2592x1520, 2048x1520, 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240	
Frame Rate	Max. 25/30fps	
Streaming	Quad Stream : H.264/H.265x3, MJPEGx1	
Composite Out	Yes	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Video Contents Analysis	Tampering, iVMD, Intrusion Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, Audio Alert	
Audio Alert	User Defined 3 Audio File	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	Yes	
Audio	1 Input, 1 Output(Terminal Block)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC, SDXC	
ETC		
Operating Humidity	0~90% RH(Non-Condensing)	
Operating Temperature	-20~+50 °C	
Power Supply	PoE(IEEE802.3af Compliance, Class0)/12VDC	
Power Consumption	190mA(8.5W)@PoE / 710mA(7.6W)@12VDC	
Dimension	144(Ø)x98(H)mm	
Net Weight	Approx. 810g	
Ingress Protection	IP66	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Quad Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering
- Video Contents Analysis

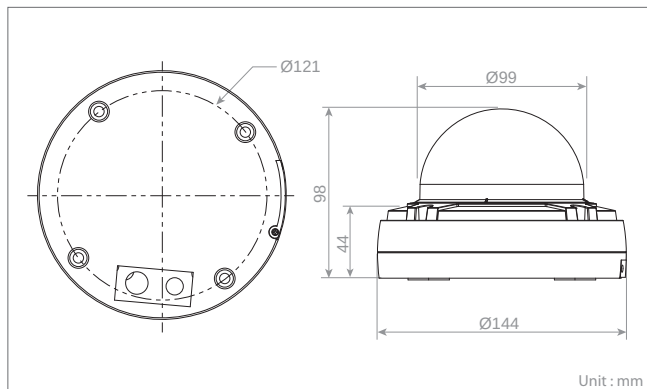
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB243(Wall Mount)
- HVPWB2(Wall/Ceiling Mount)
- HVPCB2(Ceiling Mount)
- HDA501(Junction Box)

Dimension



NVX-6217R

2MP IR Vandal Dome Network Camera

Key Features

- 2MP Resolution, 25/30fps
- Fixed 3.7mm Lens
- True Day & Night
- D-WDR(72dB)
- 28 IR LEDs for 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP66

Technical Specifications

Model	NVX-6217R	
IMAGE		
Lens	Fixed 3.7mm, F2.5	
Angle of View	90°(H)	
Image Sensor	Type	1/2.9" SONY Exmor CMOS Sensor
	Pixels	1920(H)x1080(V)_2.07M
Min. Illumination	Color : 0.3Lux@F2.5 / BW : 0Lux@F2.5	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	D-WDR(72dB)	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	3DNR	
Digital Zoom	Yes(ROI)	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor, Manual	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Aisle, Defog, HLC, S-LDC	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	28 IR LEDs
	Angle	80°(H)
	Distance	Up to 25m
Motorized Lens Control	-	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 25/30fps	
Streaming	25/30fps(Quad Stream : H.264x3, MJPEGx1)	
Composite Out	-	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Video Contents Analysis	Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	-	
Audio	1 Input, 1 Output(Terminal Block)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC, SDXC	
RS485	-	
OSD Remote Control	-	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-20~+50 °C	
Power Supply	PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption	120mA(5.7W)@PoE / 450mA(5.4W)@12VDC	
Dimension	144(Ø)x98(H)mm	
Net Weight	Approx. 785g	
Ingress Protection	IP66	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Quad Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering
- Video Contents Analysis

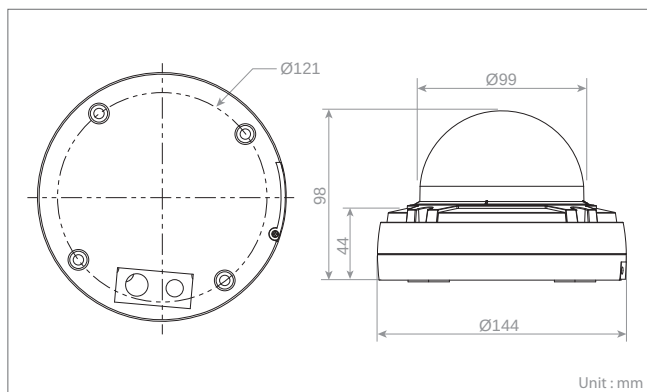
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB243(Wall Mount)
- HVPWB2(Wall/Ceiling Mount)
- HVPCB2(Ceiling Mount)
- HDA501(Junction Box)

Dimension



NVX-6277R

2MP IR Vandal Dome Network Camera

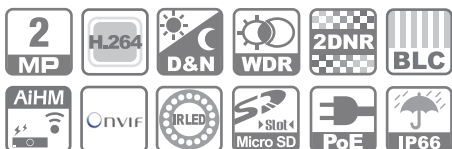
Key Features

- 2MP Resolution, 25/30fps
- Motorized Varifocal 2.8~12mm, F1.4 Lens
- True Day & Night
- D-WDR(72dB)
- 28 IR LEDs for 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP66

Technical Specifications

Model		NVX-6277R
IMAGE		
Lens		Motorized Varifocal 2.8~12mm, F1.4, DC Iris
Angle of View		105~37°(H)
Image Sensor	Type	1/2.9" SONY Exmor CMOS Sensor
	Pixels	1920(H)x1080(V)_2.07M
Min. Illumination		Color : 0.1Lux@F1.4 / BW : 0Lux@F1.4(IR LED On)
Scanning Mode		Progressive Scan
Wide Dynamic Range		D-WDR(72dB)
Day and Night Mode		True D/N(Auto, Day, Night)
Noise Reduction		3DNR
Digital Zoom		Yes(ROI)
Exposure Control		Auto
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor, Manual
Back Light Compensation		Yes
Image Effect		Flip, Mirror, Aisle, Defog, HLC, S-LDC
Flicker Free Mode		50Hz, 60Hz
Shutter Speed		Auto(1/10,000~1sec), Manual
IR Illuminator	Quantity	28 IR LEDs
	Angle	80°(H)
	Distance	Up to 25m
Motorized Lens Control		Smart Focus, Manual
VIDEO/AUDIO		
Compression		H.264(Baseline, Main, High Profile), MJPEG
Bitrate Control		CVBR, VBR
Resolution		1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240
Frame Rate		Max. 25/30fps
Streaming		25/30fps(Quad Stream : H.264x3, MJPEGx1)
Composite Out		-
Audio Compression		G.711
Audio Streaming		2 Way
SYSTEM		
Video Contents Analysis		Tampering, Line Detector, Field Detector
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)
Privacy Mask Zone		8 Programmable Zone
FTP Uploading		MJPEG
Event Notification		E-mail, FTP, Notification Server, XML Notification, AIHM
Audio Alert		User-Defined 3 Audio Files
Login Authority		Administrator, Operator, Guest
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger		4 Programmable Trigger
Security		Multi User Authority, IP Filtering, HTTPS, SSL
Network Time Sync		NTP Server, Synchronized Computer, Manual
Software Reset		Restart, Reset, Factory Default
Hardware Factory Reset		Yes
Auto Recovery		Backup, Restore
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager
SD Recording Mode		Event, Continuous
NETWORK		
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour
Client Software		Web, SmartManager, Client S/W, Mobile S/W
Max. User Connection		Live : 10 Users, Playback : 3 Users
API Support		Open API, Onvif Compliance
Mobile Support		Android, iOS
EXTERNAL IN/OUT		
Video Composite Out		-
Audio		1 Input, 1 Output(Terminal Block)
Alarm		1 Input, 1 Output(Terminal Block)
Ethernet		RJ-45(10/100Base-T)
u-SD Card		SDHC, SDXC
RS485		-
OSD Remote Control		-
ETC		
Operating Humidity		0~90%RH(Non-Condensing)
Operating Temperature		-20~+50 °C
Power Supply		PoE(IEEE802.3af Compliance, Class0), 12VDC
Power Consumption		150mA(7.2W)@PoE / 590mA(7W)@12VDC
Dimension		144(Ø)x98(H)mm
Net Weight		Approx. 810g
Ingress Protection		IP66

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

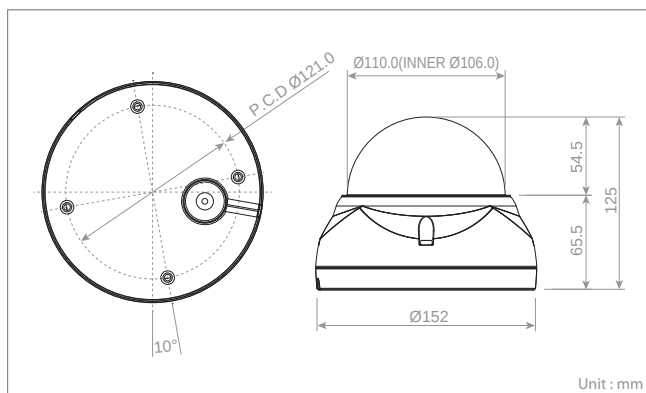
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB243(Wall Bracket)
- HCS300(Flush Mount)

Dimension



NVX-2223R/2233R

2MP IR True WDR Vandal Dome Network Camera

Key Features

- 2MP Resolution, 50/60fps
- Vari-Focal 3~9mm(F1.2, NVX-2223R)
- Motorized Vari-Focal 3~9mm(F1.2 NVX-2233R)
- True WDR(120dB)
- True Day & Night
- 24 IR LEDs For 20M Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Easy IP Address Set-up by Wired Remote Controller(Remote Controller Optional)
- SD Card Up to 32GB
- PoE, 12VDC, 24VAC
- IP66

Technical Specifications

Model	NVX-2223R		NVX-2233R	
IMAGE				
Lens		Varifocal 3.0-9.0mm, F1.2, DC IRIS		
Angle of View		Motorized Varifocal 3.0-9.0mm, F1.2, DC IRIS 100~40°(H)		
Image Sensor	Type Pixels	1/2.8" SONY Exmor CMOS Sensor 1944(H)x1224(V)		
Min. Illumination		Color : 0.4 Lux / BW : 0 Lux@F1.2, 50IRE(IR LED On)		
Scanning Mode		Progressive Scan		
Wide Dynamic Range		True WDR(120dB)		
Day and Night Mode		True Day & Night(Auto, Day, Night)		
Noise Reduction		3DNR		
Digital Zoom		16X		
Exposure Control		Auto, Hold Current		
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor		
Back Light Compensation		Yes		
Image Effect		Flip, Mirror, Aisle		
Flicker Free Mode		50Hz, 60Hz		
Shutter Speed		Auto(1/10,000~10sec), Manual		
IR Illuminator	Quantity	24 IR LEDs		
	Angle	78°		
	Distance	20M		
Motorized Lens Control		-		Yes
VIDEO/AUDIO				
Compression		H.264(Baseline, Main, High Profile), MJPEG		
Bitrate Control		CVBR, VBR		
Resolution		1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240		
Frame Rate		Max. 50/60fps@Full-HD		
Streaming		Max. 50/60fps(Dual Stream : H.264x1, MJPEGx1), Max. 25/30fps(Triple Stream : H.264x2, MJPEGx1)		
Composite Out		Yes		
Audio Compression		G.711		
Audio Streaming		2 Way		
SYSTEM				
Video Contents Analysis		DIS, Defog, Face Detection, Tampering, Line Detector, Field Detector		
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)		
Privacy Mask Zone		8 Programmable Zone		
FTP Uploading		MJPEG		
Event Notification		E-mail, FTP, Notification Server, XML Notification, Audio Alert, AIHM		
Audio Alert		User-Defined 3 Audio files		
Login Authority		Administrator, Operator, Guest		
Event Buffering	FTP	Pre : 30sec, Post : 30sec		
	SD Record	Pre : 10sec, Post : 60sec		
Manual Trigger		4 Programmable Trigger		
Security		Multi User Authority, IP Filtering, HTTPS, SSL		
Network Time Sync		NTP Server, Synchronized Computer, Manual		
Software Reset		Restart, Reset, Factory Default		
Hardware Factory Reset		Yes		
Auto Recovery		Backup, Restore		
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager, NC-Titanium		
SD Recording Mode		Event, Continuous		
NETWORK				
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour		
Client Software		Web, SmartManager, NC-Titanium, Tive HD		
Max. User Connection		Live : 10 Users, Playback : 3 Users		
API Support		Open API, Onvif Compliance		
Mobile Support		Tive HD(Android, iOS)		
EXTERNAL IN/OUT				
Video Composite Out		3.5mm Stereo Jack		
Audio		1 Input, 1 Output(3.5mm Stereo Jack)		
Alarm		1 Input, 1 Output(Terminal Block)		
Ethernet		RJ-45(10/100Base-T)		
u-SD Card		SDHC(Max. 32GB)		
OSD Remote Control		Wired Remote Controller(3.5mm Stereo Jack, Optional)		
ETC				
Operating Humidity		0~90%RH(Non-Condensing)		
Operating Temperature		-10~+50, -40~+45 with Heater(NVX-22x3D)		
Power Supply		PoE(IEEE802.3 af Compliance, Class0), 12VDC, 24VAC		
Power Consumption	172mA(7.5W)@PoE		179mA(7.8W)@PoE	
	602mA(6.7W)@12VDC		617mA(6.9W)@12VDC	
	602mA(7.5W)@24VDC		611mA(7.8W)@24VDC	
Dimension		152(Ø)x125(H)mm		
Net Weight		Approx. 970g		
Ingress Protection		IP66		

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering
- Video Contents Analysis

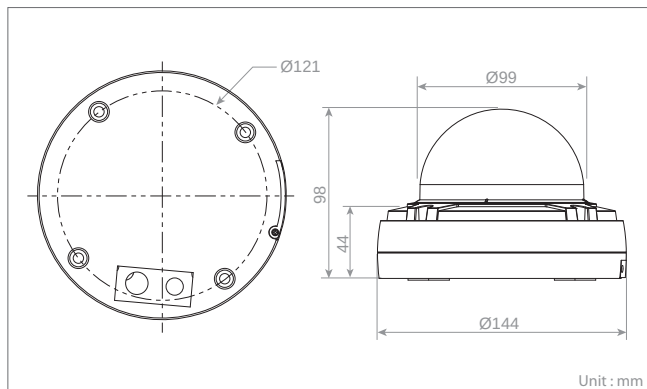
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB243(Wall Mount)
- HVPWB2(Wall/Ceiling Mount)
- HVPCB2(Ceiling Mount)
- HDA501(Junction Box)

Dimension



NVX-6317R

3MP IR Fixed Vandal Dome Network Camera

Key Features

- 3MP(2048x1536) Resolution 25/30fps
- Fixed 3.7mm Lens
- True Day & Night
- D-WDR(72dB)
- 28 IR LEDs for 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP66

Technical Specifications

Model	NVX-6317R	
IMAGE		
Lens	Fixed 3.7mm, F2.5	
Angle of View	85°(H)	
Image Sensor	Type	1/2.8" SONY Exmor CMOS Sensor
	Pixels	2048(H)x1536(V) 3.15M
Min. Illumination	Color : 0.2Lux@F2.5 / BW : 0Lux@F2.5(IR LED On)	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	D-WDR(72dB)	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	3DNR	
Digital Zoom	Yes(ROI)	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor, Manual	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Aisle, Defog, HLC, S-LDC	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	28 IR LEDs
	Angle	80°(H)
	Distance	Up to 25m
Motorized Lens Control	-	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	2048x1536, 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 25/30fps	
Streaming	25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Composite Out	-	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Video Contents Analysis	Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	-	
Audio	1 Input, 1 Output(Terminal Block)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC, SDXC	
RS485	-	
OSD Remote Control	-	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-20~+50 °C	
Power Supply	PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption	120mA(5.7W)@PoE / 450mA(5.4W)@12VDC	
Dimension	144(Ø)x98(H)mm	
Net Weight	Approx. 785g	
Ingress Protection	IP66	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering
- Video Contents Analysis

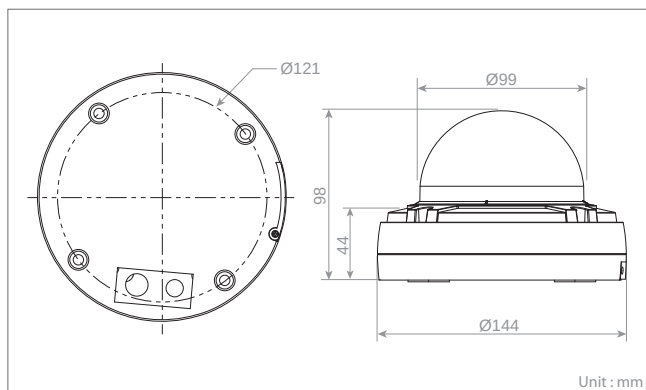
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB243(Wall Mount)
- HVPWB2(Wall/Ceiling Mount)
- HVPCB2(Ceiling Mount)
- HDA501(Junction Box)

Dimension



NVX-6377R

3MP IR Motorized Vandal Dome Network Camera

Key Features

- 3MP(2048x1536) Resolution 25/30fps
- Motorized Varifocal 2.8~12mm Lens
- True Day & Night
- D-WDR(72dB)
- 28 IR LEDs for 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP66

Technical Specifications

Model		NVX-6377R	
IMAGE			
Lens		Motorized Varifocal 2.8~12mm, F1.4, DC Iris	
Angle of View		88~35°(H)	
Image Sensor	Type	1/2.8" SONY Exmor CMOS Sensor	
	Pixels	2048(H)x1536(V) .3.15M	
Min. Illumination		Color : 0.1Lux@F1.4 / BW : 0Lux@F1.4(IR LED On)	
Scanning Mode		Progressive Scan	
Wide Dynamic Range		D-WDR(72dB)	
Day and Night Mode		True D/N(Auto, Day, Night)	
Noise Reduction		3DNR	
Digital Zoom		Yes(ROI)	
Exposure Control		Auto	
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor, Manual	
Back Light Compensation		Yes	
Image Effect		Flip, Mirror, Aisle, Defog, HLC, S-LDC	
Flicker Free Mode		50Hz, 60Hz	
Shutter Speed		Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	28 IR LEDs	
	Angle	80°(H)	
	Distance	Up to 25m	
Motorized Lens Control		Smart Focus, Manual	
VIDEO/AUDIO			
Compression		H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control		CVBR, VBR	
Resolution		2048x1536, 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate		Max. 25/30fps	
Streaming		25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Composite Out		-	
Audio Compression		G.711	
Audio Streaming		2 Way	
SYSTEM			
Video Contents Analysis		Tampering, Line Detector, Field Detector	
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone		8 Programmable Zone	
FTP Uploading		MJPEG	
Event Notification		E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert		User-Defined 3 Audio Files	
Login Authority		Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec	
	SD Record	Pre : 10sec, Post : 60sec	
Manual Trigger		4 Programmable Trigger	
Security		Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync		NTP Server, Synchronized Computer, Manual	
Software Reset		Restart, Reset, Factory Default	
Hardware Factory Reset		Yes	
Auto Recovery		Backup, Restore	
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode		Event, Continuous	
NETWORK			
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software		Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection		Live : 10 Users, Playback : 3 Users	
API Support		Open API, Onvif Compliance	
Mobile Support		Android, iOS	
EXTERNAL IN/OUT			
Video Composite Out		-	
Audio		1 Input, 1 Output(Terminal Block)	
Alarm		1 Input, 1 Output(Terminal Block)	
Ethernet		RJ-45(10/100Base-T)	
u-SD Card		SDHC, SDXC	
RS485		-	
OSD Remote Control		-	
ETC			
Operating Humidity		0~90%RH(Non-Condensing)	
Operating Temperature		-20~+50 °C	
Power Supply		PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption		150mA(7.2W)@PoE / 590mA(7W)@12VDC	
Dimension		144(Ø)x98(H)mm	
Net Weight		Approx. 810g	
Ingress Protection		IP66	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

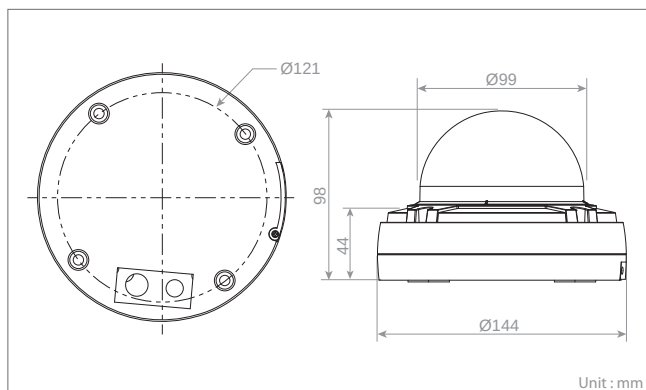
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB243(Wall Mount)
- HVPWB2(Wall Mount)
- HVPCB2(Ceiling Mount)
- HDA501(Junction Box)

Dimension



NVX-6587R

5M IR LED Motorized Vandal Dome Network Camera

Key Features

- 5M(2592x1944) 12.5/15fps
- Motorized Varifocal 3.6~10mm Lens
- D-WDR(ATR-EX)
- True Day & Night
- 28 IR LEDs for 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP66

Technical Specifications

Model		NVX-6587R	
IMAGE			
Lens		Motorized Varifocal 3.6~10mm, F1.5, DC Iris	
Angle of View		94~40°(H)	
Image Sensor	Type	1/1.8" SONY STARVIS CMOS Sensor	
	Pixels	3096(H)x2080(V)	
Min. Illumination		Color : 0.x Lux / BW : 0 Lux@F1.5, 50IRE(IR LED On)	
Scanning Mode		Progressive Scan	
Wide Dynamic Range		Yes	
Day and Night Mode		True D/N(Auto, Day, Night)	
Noise Reduction		3DNR	
Digital Zoom		Yes(ROI)	
Exposure Control		Auto	
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor, Manual	
Back Light Compensation		Yes	
Image Effect		Flip, Mirror, Aisle, Defog, HLC, S-LDC	
Flicker Free Mode		50Hz, 60Hz	
Shutter Speed		Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	28 IR LEDs	
	Angle	76°(H)	
	Distance	Up to 25m	
Motorized Lens Control		Smart Focus, Manual	
VIDEO/AUDIO			
Compression		H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control		CVBR, VBR	
Resolution		2592x1944, 2560x1600, 2560x1440 2048x1536, 1944x1944, 1440x1440, 1280x1024/960, 1024x1024/768, 720x720, 704x576, 640x480, 480x480	
Frame Rate		Max. 12.5/15fps	
Streaming		12.5/15fps(Triple Stream : H.264x2, MJPEGx1)	
Composite Out		-	
Audio Compression		G.711	
Audio Streaming		2 Way	
SYSTEM			
Video Contents Analysis		Tampering, Line Detector, Field Detector	
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone		8 Programmable Zone	
FTP Uploading		MJPEG	
Event Notification		E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert		User-Defined 3 Audio Files	
Login Authority		Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec	
	SD Record	Pre : 10sec, Post : 60sec	
Manual Trigger		4 Programmable Trigger	
Security		Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync		NTP Server, Synchronized Computer, Manual	
Software Reset		Restart, Reset, Factory Default	
Hardware Factory Reset		Yes	
Auto Recovery		Backup, Restore	
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode		Event, Continuous	
NETWORK			
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software		Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection		Live : 10 Users, Playback : 3 Users	
API Support		Open API, Onvif Compliance	
Mobile Support		Android, iOS	
EXTERNAL IN/OUT			
Video Composite Out		-	
Audio		1 Input, 1 Output(Terminal Block)	
Alarm		1 Input, 1 Output(Terminal Block)	
Ethernet		RJ-45(10/100Base-T)	
u-SD Card		SDHC, SDXC	
RS485		-	
OSD Remote Control		-	
ETC			
Operating Humidity		0~90%RH(Non-Condensing)	
Operating Temperature		-20~+50 °C	
Power Supply		PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption		180mA(8.5W)@PoE / 680mA(8.2W)@12VDC	
Dimension		144(Ø)x98(H)mm	
Net Weight		Approx. 810g	
Ingress Protection		IP66	

Specifications are subject to change without notice.



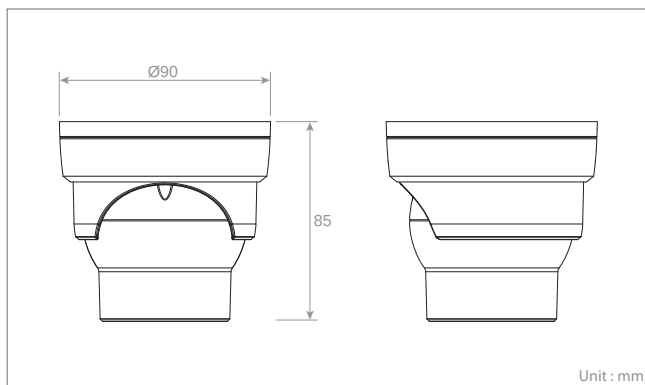
Key Functions

- Smart Codec
- Intelligent Video Motion Detection, Intrusion Detector
- Triple Stream(H.264/H.265, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



NTH-1231

2MP IR Turret Network Camera

Key Features

- H.265, H.264 Support
- 2MP Resolution
- 3.6mm Fixed Lens
- True Day & Night
- WDR(ATR-EX)
- 30m IR Distance
- PoE
- IP66

Technical Specifications

Model	NTH-1231	
IMAGE		
Lens	Fixed Focal 3.6mm, F2.1	
Angle of View	83°(H)	
Image Sensor	Type	1/2.9" Sony Exmor CMOS
	Pixels	1984(H)x1125(V)
Min. Illumination	Color : 0.1Lux / BW : 0Lux@F2.1 (IR LED On)	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	Yes	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	3DNR	
Digital Zoom	ROI	
Exposure Control	Auto	
White Balance Control	Auto, Manual	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Defog	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	30 IR LEDs
	Angle	90°
	Distance	30m
VIDEO/AUDIO		
Compression	H.264/H.265(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CBR, CVBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240	
Frame Rate	Max. 30/25fps(NTSC/PAL)	
Streaming	Triple Stream : H.264/H.265x2, MJPEGx1	
SYSTEM		
Video Contents Analysis	Tampering, iVMD, Intrusion Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	4 Programmable Zone	
Smart Codec ROI	8 Regions	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification	
Login Authority	Administrator, Operator, Guest	
Event Buffering(FTP)	Pre : 30sec, Post : 30sec	
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	-	
Audio	-	
Alarm	-	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	-	
ETC		
Operating Humidity	95% or less(Non-Condensing)	
Operating Temperature	-20~+50 °C	
Power Supply	PoE/12VDC	
Power Consumption	106mA(5.1W)@PoE / 360mA(4.3W)@12VDC	
Dimension	90(Ø)x85(H)mm	
Net Weight	250g	
Ingress Protection	IP66	

Specifications are subject to change without notice.



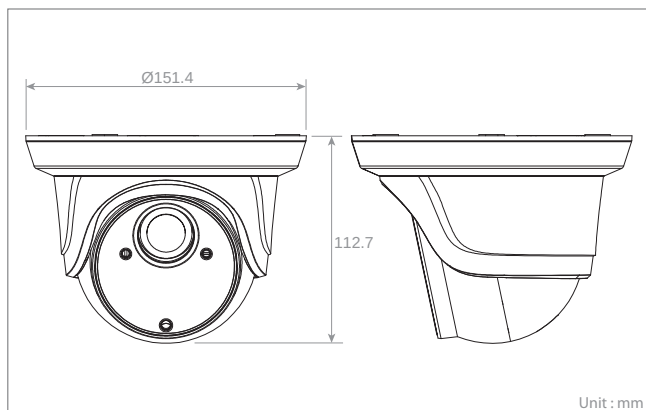
Key Functions

- Smart Codec
- Intelligent Video Motion Detection, Intrusion Detector
- Triple Stream(H.264/H.265, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



NTH-12J2

2MP IR Motorized Turret Network Camera

Key Features

- H.265, H.264 Support
- 2MP Resolution
- Motorized Varifocal 2.8~12mm Lens
- True Day & Night
- WDR(ATR-EX)
- 30 IR LEDs for 30m Coverage
- PoE
- IP66

Technical Specifications

Model	NTH-24J2	
IMAGE		
Lens	Motorized Varifocal 2.8~12mm F1.4	
Angle of View	94°(H)~34°(H)	
Image Sensor	Type	1/2.9" Sony Exmor CMOS
	Pixels	1984(H)x1125(V)
Min. Illumination	Color : 0.1Lux@F2.1 / BW : 0Lux@F2.1(IR LED On)	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	Yes	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	2DNR, 3DNR	
Digital Zoom	ROI	
Exposure Control	Auto	
White Balance Control	Auto, Manual	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Defog	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	30 IR LEDs
	Angle	90/30°(H)
	Distance	30m
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CBR, CVBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240	
Frame Rate	Max. 30/25fps(NTSC/PAL)	
Streaming	Triple Stream : H.264/H.265x2, MJPEGx1	
SYSTEM		
Video Contents Analysis	Tampering, iVMD, Intrusion Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	4 Programmable Zone	
Smart Codec ROI	8 Regions	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification	
Login Authority	Administrator, Operator, Guest	
Event Buffering(FTP)	Pre : 30sec, Post : 30sec	
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	-	
Audio	-	
Alarm	-	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	-	
ETC		
Operating Humidity	95% or less(Non-Condensing)	
Operating Temperature	-20~+50℃	
Power Supply	PoE/12VDC	
Power Consumption	175mA(8.4W)@PoE / 550mA(6.6W)@12VDC	
Dimension	151.4(Ø)x112.7(H)mm	
Net Weight	900g	
Ingress Protection	IP66	

Specifications are subject to change without notice.



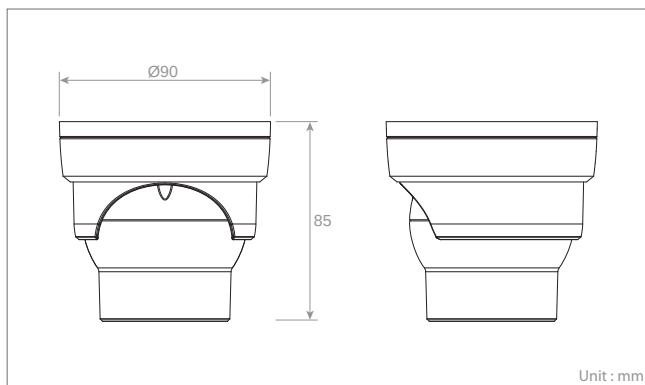
Key Functions

- Smart Codec
- Intelligent Video Motion Detection, Intrusion Detector
- Triple Stream(H.264/H.265, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



NTH-2431

4MP IR Turret Network Camera

Key Features

- H.265, H.264 Support
- 4MP Resolution
- 3.6mm Fixed Lens
- True Day & Night
- WDR(ATR-EX)
- 30m IR Distance
- PoE
- IP66

Technical Specifications

Model		NTH-2431
IMAGE		
Lens		Fixed Focal 3.6mm, F2.1
Angle of View		83°(H)
Image Sensor	Type	1/3" CMOS Sensor
	Pixels	2688(H)x1520(V)
Min. Illumination		Color : 0.1Lux / BW : 0Lux@F2.1 (IR LED On)
Scanning Mode		Progressive Scan
Wide Dynamic Range		Yes
Day and Night Mode		True D/N(Auto, Day, Night)
Noise Reduction		3DNR
Digital Zoom		ROI
Exposure Control		Auto
White Balance Control		Auto, Manual
Back Light Compensation		Yes
Image Effect		Flip, Mirror, Defog
Flicker Free Mode		50Hz, 60Hz
Shutter Speed		Auto(1/10,000~1sec), Manual
IR Illuminator	Quantity	30 IR LEDs
	Angle	90°
	Distance	30m
VIDEO/AUDIO		
Compression		H.264/H.265(Baseline, Main, High Profile), MJPEG
Capture Mode		4M(2592x1520) or 2M(1920x1080)
Bitrate Control		CBR, CVBR
Resolution	4M Capture Mode : 2592x1520, 2048x1520, 1920x1080, 1280x1024, 1280x720/960, 704x480/576, 640x480, 320x240	
	2M Capture Mode : 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240	
Frame Rate		4M Capture Mode : Max. 20/20fps(NTSC/PAL) 2M Capture Mode : Max. 30/25fps(NTSC/PAL)
Streaming		Triple Stream : H.264/H.265x2, MJPEGx1
SYSTEM		
Video Contents Analysis		Tampering, iVMD, Intrusion Detector
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)
Privacy Mask Zone		4 Programmable Zone
Smart Codec ROI		8 Regions
FTP Uploading		MJPEG
Event Notification		E-mail, FTP, Notification Server, XML Notification
Login Authority		Administrator, Operator, Guest
Event Buffering(FTP)		Pre : 30sec, Post : 30sec
Manual Trigger		4 Programmable Trigger
Security		Multi User Authority, IP Filtering, HTTPS, SSL
Network Time Sync		NTP Server, Synchronized Computer, Manual
Software Reset		Restart, Reset, Factory Default
Auto Recovery		Backup, Restore
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager
NETWORK		
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour
Client Software		Web, SmartManager, Client S/W, Mobile S/W
Max. User Connection		Live : 10 Users, Playback : 3 Users
API Support		Open API, Onvif Compliance
Mobile Support		Android, iOS
EXTERNAL IN/OUT		
Video Composite Out		-
Audio		-
Alarm		-
Ethernet		RJ-45(10/100Base-T)
u-SD Card		-
ETC		
Operating Humidity		95% or less(Non-Condensing)
Operating Temperature		-20~+50 °C
Power Supply		PoE/12VDC
Power Consumption		124mA(6W)@PoE / 380mA(4.6W)@12VDC
Dimension		90(Ø)x85(H)mm
Net Weight		250g
Ingress Protection		IP66

Specifications are subject to change without notice.



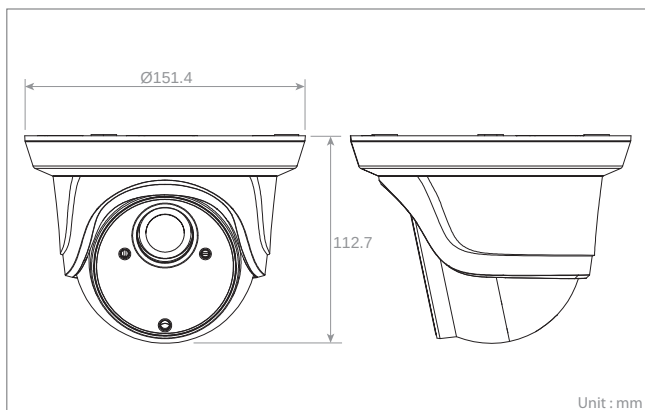
Key Functions

- Smart Codec
- Intelligent Video Motion Detection, Intrusion Detector
- Triple Stream(H.264/H.265, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



NTH-24J2

4MP IR Motorized Network Camera

Key Features

- H.265, H.264 Support
- 4M Resolution
- Motorized Varifocal 2.8~12mm Lens
- True Day & Night
- WDR(ATR-EX)
- 30 IR LEDs for 30m Coverage
- PoE
- IP66

Technical Specifications

Model	NTH-24J2	
IMAGE		
Lens	Motorized Varifocal 2.8~12mm	
Angle of View	94~34°(H)	
Image Sensor	Type	1/3" CMOS Sensor
	Pixels	2688(H)x1520(V)
Min. Illumination	Color : 0.1Lux@F2.1 / BW : 0Lux@F2.1(IR LED On)	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	Yes	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	2DNR, 3DNR	
Digital Zoom	ROI	
Exposure Control	Auto	
White Balance Control	Auto, Manual	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Defog	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	30 IR LEDs
	Angle	90/30°(H)
	Distance	30m
VIDEO/AUDIO		
Compression	H.265, H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CBR, CVBR	
Resolution	4M Capture Mode : 2592x1520, 2048x1520, 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240	
	2M Capture Mode : 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x480, 320x240	
Frame Rate	4M Capture Mode : Max. 20/20fps(NTSC/PAL) 2M Capture Mode : Max. 30/25fps(NTSC/PAL)	
Streaming	Triple Stream : H.264/H.265x2, MJPEGx1	
SYSTEM		
Video Contents Analysis	Tampering, iVMD, Intrusion Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	4 Programmable Zone	
Smart Codec ROI	8 Regions	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification	
Login Authority	Administrator, Operator, Guest	
Event Buffering(FTP)	Pre : 30sec, Post : 30sec	
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	-	
Audio	-	
Alarm	-	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	-	
ETC		
Operating Humidity	95% or less(Non-Condensing)	
Operating Temperature	-20~+50 °C	
Power Supply	PoE/12VDC	
Power Consumption	175mA(8.4W)@PoE / 550mA(6.6W)@12VDC	
Dimension	151.4(Ø)x112.7(H)mm	
Net Weight	Approx. 900g	
Ingress Protection	IP66	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

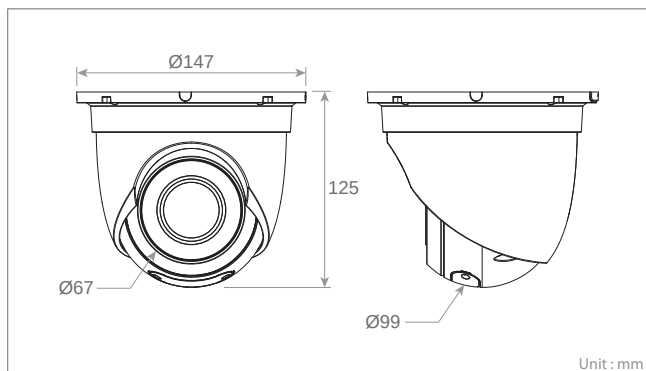
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB243X(Wall Mount)
- HDA501(Junction Box)

Dimension



NVX-2295R

2MP IR Easytrax True WDR PT Network Camera

Key Features

- Motorized Pan/Tilt Control
- 2M Resolution 50/60fps
- Motorized Varifocal 2.8~12mm Lens
- 30 IR LEDs for 25m Coverage
- True WDR(120dB)
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC up to 32GB)
- PoE, 12VDC
- IP66

Technical Specifications

Model		NVX-2295R	
IMAGE			
Lens		Motorized Varifocal 2.8~12mm, F1.4, DC Iris	
Angle of View		95~57°(H)	
Image Sensor	Type	1/2.8" SONY Exmor CMOS Sensor	
	Pixels	1952(H)x1236(V)	
Min. Illumination		Color : 0.1Lux@F1.4 / BW : 0Lux@IR On	
Scanning Mode		Progressive Scan	
Wide Dynamic Range		True WDR(120dB)	
Day and Night Mode		True D/N(Auto, Day, Night)	
Noise Reduction		2DNR, 3DNR	
Digital Zoom		ROI	
Exposure Control		Auto	
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor, Manual	
Back Light Compensation		Yes	
Image Effect		Flip, Mirror, Aisle, Defog, DIS	
Flicker Free Mode		50Hz, 60Hz	
Shutter Speed		Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	30 IR LEDs	
	Angle	76°(H)	
	Distance	Up to 25m	
Motorized Lens Control		Smart Focus, Manual	
VIDEO/AUDIO			
Compression		H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control		CVBR, VBR	
Resolution		1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate		Max. 50/60fps	
Streaming		50/60fps(Dual Stream : H.264x1, MJPEGx1) 25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Audio Compression		G.711	
Audio Streaming		2 Way	
SYSTEM			
Video Contents Analysis		Face Detector, Tampering, Line Detector, Field Detector	
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone		8 Programmable Zone	
FTP Uploading		MJPEG	
Event Notification		E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert		User-Defined 3 Audio Files	
Login Authority		Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec	
	SD Record	Pre : 10sec, Post : 60sec	
Manual Trigger		4 Programmable Trigger	
Security		Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync		NTP Server, Synchronized Computer, Manual	
Software Reset		Restart, Reset, Factory Default	
Hardware Factory Reset		Yes	
Auto Recovery		Watch Dog	
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode		Event, Continuous	
NETWORK			
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software		Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection		Live : 10 Users, Playback : 3 Users	
API Support		Open API, Onvif Compliance	
Mobile Support		Android, iOS	
EXTERNAL IN/OUT			
Video Composite Out		-	
Audio		1 Input, 1 Output(Terminal Block)	
Alarm		1 Input, 1 Output(Terminal Block)	
Ethernet		RJ-45(10/100Base-T)	
u-SD Card		SDHC(Max. 32GB)	
RS485		-	
OSD Remote Control		-	
ETC			
Operating Humidity		0~90%RH(Non-Condensing)	
Operating Temperature		-20~+50 °C	
Power Supply		PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption		200mA(9.6W)@PoE / 600mA(7.2W)@12VDC	
Dimension		147(Ø)x125(H)mm	
Net Weight		Approx. 935g	
Ingress Protection		IP66	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AiHM Event
- Event Buffering

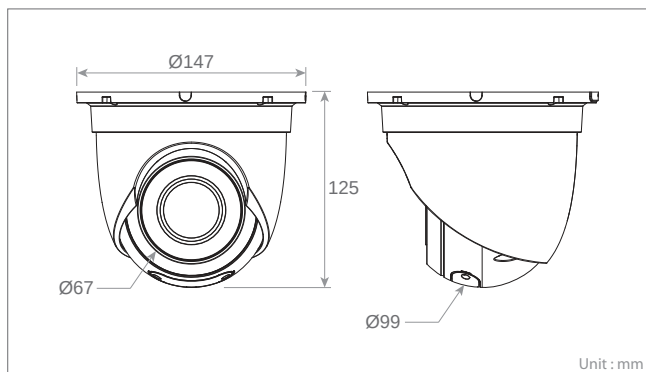
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB243X(Wall Mount)
- HDA501(Junction Box)

Dimension



NVX-6375R

3MP IR Easytrax PT Network Camera

Key Features

- Motorized Pan/Tilt Control
- 3M Resolution 25/30fps
- Motorized Varifocal 2.8~12mm Lens
- 30 IR LEDs for 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC/SDXC)
- PoE, 12VDC
- IP66

Technical Specifications

Model		NVX-6375R	
IMAGE			
Lens		Motorized Varifocal 2.8~12mm, F1.4, DC Iris	
Angle of View		88~35°(H)	
Image Sensor	Type	1/2.8" SONY Exmor CMOS Sensor	
	Pixels	2048(H)x1536(V) 3.15M	
Min. Illumination		Color : 0.1Lux / BW : 0Lux@F1.4	
Scanning Mode		Progressive Scan	
Wide Dynamic Range		Yes	
Day and Night Mode		True D/N(Auto, Day, Night)	
Noise Reduction		2DNR, 3DNR	
Digital Zoom		Yes(ROI)	
Exposure Control		Auto	
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor, Manual	
Back Light Compensation		Yes	
Image Effect		Flip, Mirror, Aisle, Defog, HLC, S-LDC	
Flicker Free Mode		50Hz, 60Hz	
Shutter Speed		Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	30 IR LEDs	
	Angle	76°(H)	
	Distance	Up to 25m	
Motorized Lens Control		Smart Focus, Manual	
VIDEO/AUDIO			
Compression		H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control		CVBR, VBR	
Resolution		2048x1536, 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate		Max. 25/30fps	
Streaming		25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Composite Out		-	
Audio Compression		G.711	
Audio Streaming		2 Way	
SYSTEM			
Video Contents Analysis		Tampering, Line Detector, Field Detector	
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone		8 Programmable Zone	
FTP Uploading		MJPEG	
Event Notification		E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert		User-Defined 3 Audio Files	
Login Authority		Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec	
	SD Record	Pre : 10sec, Post : 60sec	
Manual Trigger		4 Programmable Trigger	
Security		Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync		NTP Server, Synchronized Computer, Manual	
Software Reset		Restart, Reset, Factory Default	
Hardware Factory Reset		Yes	
Auto Recovery		Backup, Restore	
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode		Event, Continuous	
NETWORK			
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software		Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection		Live : 10 Users, Playback : 3 Users	
API Support		Open API, Onvif Compliance	
Mobile Support		Android, iOS	
EXTERNAL IN/OUT			
Video Composite Out		-	
Audio		1 Input, 1 Output(Terminal Block)	
Alarm		1 Input, 1 Output(Terminal Block)	
Ethernet		RJ-45(10/100Base-T)	
u-SD Card		SDHC, SDXC	
RS485		-	
OSD Remote Control		-	
ETC			
Operating Humidity		0~90%RH(Non-Condensing)	
Operating Temperature		-20~+50 °C	
Power Supply		PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption		160mA(7.7W)@PoE / 610mA(7.3W)@12VDC	
Dimension		147(Ø)x125(H)mm	
Net Weight		Approx. 705g	
Ingress Protection		IP66	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AiHM Event
- Event Buffering

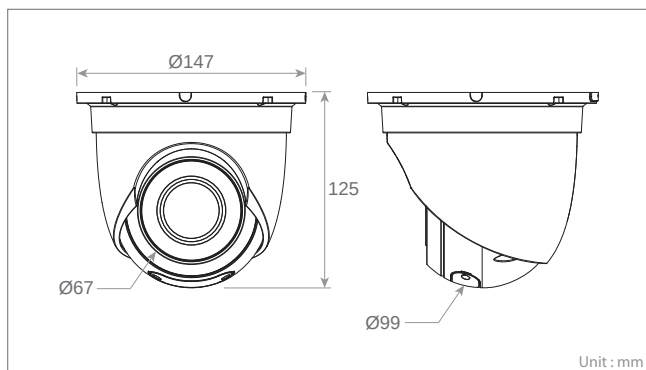
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB243X(Wall Mount)
- HDA501(Junction Box)

Dimension



NVX-6585R

5MP IR Easytrax PT Network Camera

Key Features

- Motorized Pan/Tilt Control
- 5M Resolution 12.5/15fps
- Motorized Varifocal 3.6~10mm Lens
- 30 IR LEDs for 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC/SDXC)
- PoE, 12VDC
- IP66

Technical Specifications

Model	NVX-6585R	
IMAGE		
Lens	Motorized Varifocal 3.6~10mm, F1.5, DC Iris	
Angle of View	95~40°(H)	
Image Sensor	Type	1/1.8" SONY STARVIS CMOS Sensor
	Pixels	3096(H)x2094(V)
Min. Illumination	Color : 0.1Lux / BW : 0Lux@F1.5	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	D-WDR(72dB)	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	2DNR, 3DNR	
Digital Zoom	Yes(ROI)	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor, Manual	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Aisle, Defog, HLC, S-LDC	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	30 IR LEDs
	Angle	76°(H)
	Distance	Up to 25m
Motorized Lens Control	Smart Focus, Manual	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	2592x1944, 2560x1600, 2560x1440, 2048x1536, 1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 12.5/15fps	
Streaming	12.5/15fps(Triple Stream : H.264x2, MJPEGx1)	
Composite Out	-	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Video Contents Analysis	Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	-	
Audio	1 Input, 1 Output(Terminal Block)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC, SDXC	
RS485	-	
OSD Remote Control	-	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-20~+50 °C	
Power Supply	PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption	160mA(7.7W)@PoE / 610mA(7.3W)@12VDC	
Dimension	147(Ø)x125(H)mm	
Net Weight	Approx. 705g	
Ingress Protection	IP66	

Specifications are subject to change without notice.

NETWORK SPEED DOME CAMERA

Model	Type	Image	Key SPEC							
			Codec	Sensor	Lens	Min. Illumination	AE	IR (Distance)	Ingress Protection	Page
NMX-22032D3	2M 20 x PTZ		H.264	1/2.8" CMOS	4.7~94mm AF	0.013Lux	TWDR	-	IP66	p.48
NMX-22032D3A	2M 30 x PTZ		H.264	1/2.8" CMOS	4.7~94mm AF	0.013Lux	TWDR	-	IP66	p.49
NFX-22033D1	2M 30 x PTZ		H.264	1/2.8" CMOS	4.3~129mm AF	0.013Lux	TWDR	-	-	p.50
NFX-22033D1A	2M 30 x PTZ		H.264	1/2.8" CMOS	4.3~129mm AF	0.013Lux	TWDR	-	IP66	p.51
NFX-22153D1	2M 30 x PTZ		H.264	1/2.8" CMOS	4.3~129mm AF	0.013Lux	TWDR	2EA (200m)	IP66	p.52
NFX-22153H3	2M 30 x PTZ		H.264	1/1.9" CMOS	6.0~180mm AF	0.013Lux	TWDR	2EA (300m)	IP66	p.53
NFX-22154H3L	2M 36 x PTZ		H.264	1/1.9" CMOS	6.0~216mm AF	0.013Lux	TWDR	2EA (500m)	IP66	p.54



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

Series Model

- NMX-22032D3A(-50~+65℃, Heater & Fan)

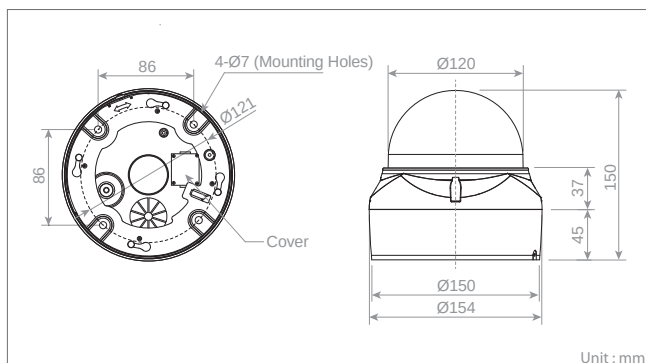
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB243(Wall Bracket)
- HVPCB2(Ceiling Bracket)
- HVPWB2(Wall Bracket)

Dimension



NMX-22032D3(H)

20X 2MP Vandal Mini Speed Dome Network Camera

Key Features

- 2MP Resolution with Compact Design
- Optical Zoom 20X, Digital Zoom 16X
- True WDR(120dB), True Day & Night
- Max. 380°/sec Speed(Preset)
- Preset(256), Tour(8), Pattern(8), Privacy(16), Motion(16)
- Audio In/Out(1/1), Alarm In/Out(1/1)
- VCA(DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector)
- SD Card Up to 32GB
- PoE, 12VDC, 24VAC
- IP66

Technical Specifications

Model		NMX-22032D3	NMX-22032D3H
IMAGE			
Lens		Optical Zoom 20X, 4.7~94mm	
Angle of View		55.5~3°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor	
	Pixels	1945(H)x1097(V)	
Min. Illumination		Color : 0.35Lux, BW : 0.013Lux@50IRE	
Scanning Mode		Progressive Scan	
Wide Dynamic Range		True WDR(120dB)	
Day and Night Mode		True Day & Night	
Noise Reduction		3DNR	
Digital Zoom		16X	
Exposure Control		Auto, Manual, Shutter Priority, Iris Priority	
White Balance Control		Auto, Fluorescent, Incandescent, Outdoor, Manual	
Back Light Compensation		Yes	
Image Effect		Flip	
Shutter Speed		25/30fps : Auto(1/30,000~x8sec), Manual 50/60fps : Auto(1/50,000~x8sec), Manual	
VIDEO/AUDIO			
Compression		H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control		CVBR, VBR	
Resolution		1920x1080, 1280x1024, 1280x720/960, 704x480/576, 640x360/480, 320x240	
Frame Rate		Max. 50/60fps	
Streaming		50/60fps(Dual Stream : H.264x1, MJPEGx1) 25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Audio Compression		G.711	
Audio Streaming		2 Way	
PTZ FUNCTION			
Pan Range		360°Endless	
Pan Speed		Max. 380°/sec.(Preset)	
Tilt Range		-10~190°	
Tilt Speed		Max. 380°/sec.(Preset)	
Auto Calibration		0.1~6°	
Preset		256	
Tour		8	
Pattern		8	
Home Function		Yes	
SYSTEM			
Video Contents Analysis		DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector	
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Masking		16 Programmable Zone	
FTP Uploading		MJPEG	
Event Notification		E-mail, FTP, Notification Server, XML Notification, Audio Alert, AIHM	
Audio Alert		User-Defined 3 Audio Files	
Login Authority		Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec	
	SD Record	Pre : 10sec, Post : 60sec	
Manual Trigger		4 Programmable Trigger	
Security		Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync		NTP Server, Synchronized Computer, Manual	
Software Reset		Restart, Reset, Factory Default	
Hardware Factory Reset		Yes	
Auto Recovery		Backup, Restore	
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager, NC-Titanium	
SD Recording Mode		Event, Continuous	
NETWORK			
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software		Web, SmartManager, NC-Titanium, Tive HD	
Max. User Connection		Live : 10 Users, Playback : 3 Users	
API Support		Open API, Onvif Compliance	
Mobile Support		Tive HD(Android, iOS)	
EXTERNAL IN/OUT			
Audio		1 Input, 1 Output(3.5mm Stereo Jack)	
Alarm		4 Input, 1 Output	
Ethernet		RJ-45(10/100Base-T)	
u-SD Card		SDHC(Max. 32GB)	
ETC			
Operating Humidity		0~90% RH(Non-Condensing)	
Operating Temperature		-10~+50℃	
Power Supply		PoE(IEEE802.3af Compliance, Class0), 12VDC, 24VAC	
Power Consumption		250mA(12W)@PoE 1A(12W)@12VDC, 24VAC	
Dimension		154(Ø)x150(H)mm	
Net Weight		Approx. 1.6kg	
Ingress Protection		IP66	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

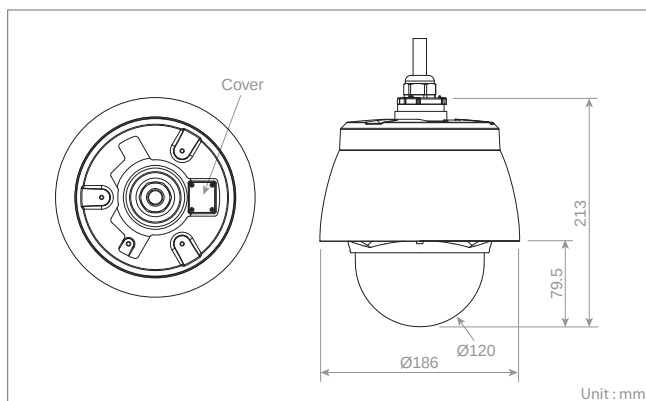
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB241(Housing Ceiling Bracket)
- HDB242E(Housing Wall Bracket)
- HCM201(Roof & Parapet Mount)

Dimension



NMX-22032D3A

20X 2MP Mini Speed Dome Network Camera

Key Features

- 2MP Resolution with Compact Design
- Optical Zoom 20X, Digital Zoom 16X
- True WDR(120dB)
- True Day & Night
- Max. 380°/sec Speed(Preset)
- Preset(256), Tour(8), Pattern(8), Privacy(16), Motion(16)
- Audio In/Out(4/1), Alarm In/Out(4/1)
- VCA(DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector)
- SD Card Up to 32GB
- PoE, 12VDC, 24VAC
- IP66 with SunShield

Technical Specifications

Model	NMX-22032D3A	
IMAGE		
Lens	Optical Zoom 20X, 4.7~94mm	
Angle of View	55.5~3.0°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor
	Pixels	1945(H)x1097(V)
Min. Illumination	Color : 0.35 Lux / BW : 0.013 Lux@50IRE	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	True WDR(120dB)	
Day and Night Mode	True Day & Night	
Noise Reduction	3DNR	
Digital Zoom	16X	
Exposure Control	Auto, Manual, Shutter Priority, Iris Priority	
White Balance Control	Auto, Fluorescent, Incandescent, Outdoor, Manual	
Back Light Compensation	Yes	
Image Effect	Flip	
Shutter Speed	25/30fps : Auto(1/30,000~x8sec), Manual 50/60fps : Auto(1/50,000~x8sec), Manual	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 50/60fps	
Streaming	50/60fps(Dual Stream : H.264x1, MJPEGx1), 25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Audio Compression	G.711	
Audio Streaming	2 Way	
PTZ FUNCTION		
Pan Range	360°Endless	
Pan Speed	Max. 380°/sec.(Preset)	
Tilt Range	-10~190°	
Tilt Speed	Max. 380°/sec.(Preset)	
Auto Calibration	0.1~6°	
Preset	256	
Tour	8	
Pattern	8	
Home Function	Yes	
SYSTEM		
Video Contents Analysis	DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Maskng	16 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, Audio Alert, AIHM	
Audio Alert	User-Defined 3 Audio files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager, NC-Titanium	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, NC-Titanium, Tive HD	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Tive HD(Android, iOS)	
EXTERNAL IN/OUT		
Audio	1 Input, 1 Output(3.5mm Stereo Jack)	
Alarm	4 Input, 1 Output	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC(Max. 32GB)	
ETC		
Operating Humidity	0~90% RH(Non-Condensing)	
Operating Temperature	-50~+65 °C	
Power Supply	Camera : PoE(IEEE802.3af Compliance, Class0), 12VDC, 24VAC Heater & Pan : 24VAC	
Power Consumption	Camera : 250mA(12W)@PoE / 1.0A(12W)@12VDC, 24VAC Heater & Pan : 1.7A(45W)@24VAC	
Dimension	186(Ø)x213(H)mm	
Net Weight	2.3kg	
Ingress Protection	IP66	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

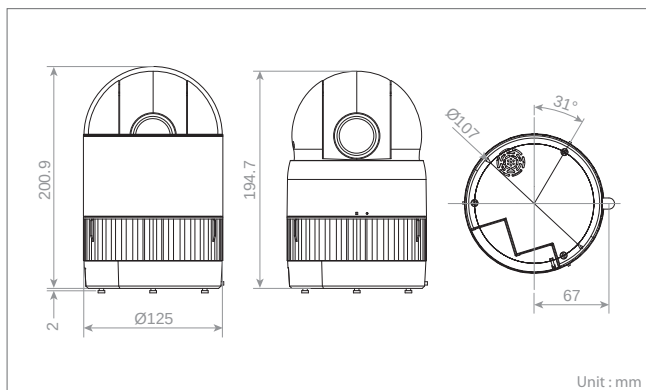
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HCH304 Series(Outdoor Housing)
- HDB241(Housing Ceiling Bracket)
- HDB242E(Housing Wall Bracket)
- HCS251 Series(Recess Mount Kit)

Dimension



NFX-22033D1

30X 2MP Speed Dome Network Camera

Key Features

- 2MP Resolution
- Optical Zoom 30X, Digital Zoom 16X
- True WDR(120dB), True Day & Night
- Max. 380°/sec Speed(Preset)
- Preset(256), Tour(8), Pattern(8), Privacy(16), Motion(16)
- Audio In/Out(4/1), Alarm In/Out(1/1)
- VCA(DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector)
- SD Card Up to 32GB
- PoE, 12VDC, 24VAC

Technical Specifications

Model	NFX-22033D1	
IMAGE		
Lens	Optical Zoom 30X, 4.3~129mm	
Angle of View	61.8~2.9°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor
	Pixels	1945(H)x1097(V)
Min. Illumination	Color : 0.35Lux / BW : 0.013Lux@50IRE	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	True WDR(120dB)	
Day and Night Mode	True Day & Night	
Noise Reduction	3DNR	
Digital Zoom	16X	
Exposure Control	Auto, Manual, Shutter Priority, Iris Priority	
White Balance Control	Auto, Fluorescent, Incandescent, Outdoor, Manual	
Back Light Compensation	Yes	
Image Effect	Flip	
Shutter Speed	25/30fps : Auto(1/30,000~x8sec), Manual 50/60fps : Auto(1/50,000~x8sec), Manual	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 50/60fps	
Streaming	50/60fps(Dual Stream : H.264x1, MJPEGx1) 25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Audio Compression	G.711	
Audio Streaming	2 Way	
PTZ FUNCTION		
Pan Range	360°Endless	
Pan Speed	Max. 380°/sec.(Preset)	
Tilt Range	-10~190°	
Tilt Speed	Max. 380°/sec.(Preset)	
Auto Calibration	0.1~6"	
Preset	256	
Tour	8	
Pattern	8	
Home Function	Yes	
SYSTEM		
Video Contents Analysis	DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Masking	16 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, Audio Alert, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager, NC-Titanium	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, NC-Titanium, Tive HD	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Tive HD(Android, iOS)	
EXTERNAL IN/OUT		
Video Composite Out	Yes	
Audio	1 Input, 1 Output(3.5mm Stereo Jack)	
Alarm	4 Input, 1 Output	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC(Max. 32GB)	
RS485	Yes	
ETC		
Operating Humidity	0~90% RH(Non-Condensing)	
Operating Temperature	0~+50 °C	
Power Supply	PoE(IEEE802.3af Compliance, Class0), 12VDC, 24VAC	
Power Consumption	270mA(12.8W)@PoE / 1.1A(13.2W)@12VDC, 24VAC	
Dimension	125(Ø)x200.9(H)mm	
Net Weight	Approx. 1.2kg	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

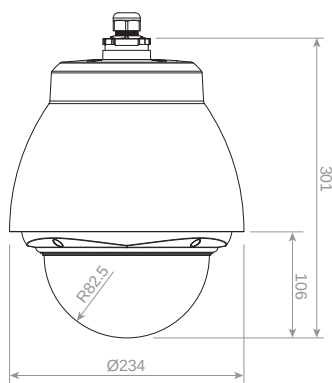
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB241(Housing Ceiling Bracket)
- HDB242E(Housing Wall Bracket)
- HCM201(Roof & Parapet Mount)

Dimension



Unit : mm

NFX-22033D1A

30X 2MP Speed Dome Network Camera

Key Features

- 2MP Resolution
- Optical Zoom 30X, Digital Zoom 16X
- True WDR(120dB), True Day & Night
- Max. 380°/sec Speed(Preset)
- Preset(256), Tour(8), Pattern(8), Privacy(16), Motion(16)
- Audio In/Out(4/1), Alarm In/Out(1/1)
- VCA(DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector)
- SD Card Up to 32GB
- PoE, 12VDC, 24VAC
- IP66

Technical Specifications

Model	NFX-22033D1A	
IMAGE		
Lens	Optical Zoom 30X, 4.3~129mm	
Angle of View	61.8~2.9°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor
	Pixels	1945(H)x1097(V)
Min. Illumination	Color : 0.35Lux / BW : 0.013Lux@50IRE	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	True WDR(120dB)	
Day and Night Mode	True Day & Night	
Noise Reduction	3DNR	
Digital Zoom	16X	
Exposure Control	Auto, Manual, Shutter Priority, Iris Priority	
White Balance Control	Auto, Fluorescent, Incandescent, Outdoor, Manual	
Back Light Compensation	Yes	
Image Effect	Flip	
Shutter Speed	25/30fps : Auto(1/30,000~x8sec), Manual 50/60fps : Auto(1/50,000~x8sec), Manual	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 50/60fps	
Streaming	50/60fps(Dual Stream : H.264x1, MJPEGx1) 25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Audio Compression	G.711	
Audio Streaming	2 Way	
PTZ FUNCTION		
Pan Range	360°Endless	
Pan Speed	Max. 380°/sec.(Preset)	
Tilt Range	-10~190°	
Tilt Speed	Max. 380°/sec.(Preset)	
Auto Calibration	0.1~6"	
Preset	256	
Tour	8	
Pattern	8	
Home Function	Yes	
SYSTEM		
Video Contents Analysis	DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Masking	16 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, Audio Alert, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager, NC-Titanium	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, NC-Titanium, Tive HD	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Tive HD(Android, iOS)	
EXTERNAL IN/OUT		
Video Composite Out	Yes	
Audio	1 Input, 1 Output(3.5mm Stereo Jack)	
Alarm	4 Input, 1 Output	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC(Max. 32GB)	
RS485	Yes	
ETC		
Operating Humidity	0~90% RH(Non-Condensing)	
Operating Temperature	-50~+65℃	
Power Supply	Camera : PoE(802.3af, Class0), 12VDC, 24VAC Heater & Fan : 24VAC	
Power Consumption	Camera : 270mA(12.8W)@PoE / 1.1A(13.2W)@12VDC, 24VAC Heater & Fan : 2.2A(50W)@24VAC	
Dimension	234(Ø)x301(H)mm	
Net Weight	Approx. 3.3kg	
Ingress Protection	IP66	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

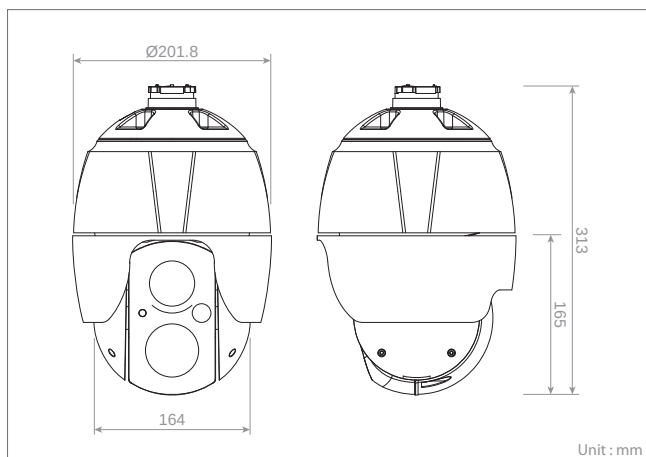
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB241(Housing Ceiling Bracket)
- HDB242E(Housing Wall Bracket)

Dimension



NFX-22153D1/22253D1H

30X 2MP IR Speed Dome Network Camera

Key Features

- 2MP Resolution
- Optical Zoom 30X, Digital Zoom 16X
- Long Range IR LED with Synchronization(up to 200m)
- True WDR(120dB), True Day & Night
- Max. 380°/sec Speed(Preset)
- Preset(256), Tour(8), Pattern(8), Privacy(16), Motion(16)
- Alarm Input(4), Alarm Output(1), Audio Input(1), Audio Output(1)
- VCA(DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector)
- SD Card Up to 32GB
- PoE, 12VDC, 24VAC
- IP66

Technical Specifications

Model	NFX-22153D1		NFX-22253D1H
IMAGE			
Lens	Optical Zoom 30X, 4.3~129mm		
Angle of View	61.8~2.9°(H)		
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor	
	Pixels	1945(H)x1097(V)	
Min. Illumination	Color : 0.35Lux / BW : 0Lux(IR LED On)		
Scanning Mode	Progressive Scan		
Wide Dynamic Range	True WDR(120dB)		
Day and Night Mode	True Day & Night		
Noise Reduction	3DNR		
Digital Zoom	16X		
Exposure Control	Auto, Manual, Shutter Priority, Iris Priority		
White Balance Control	Auto, Fluorescent, Incandescent, Outdoor, Manual		
Back Light Compensation	Yes		
Image Effect	Flip		
Shutter Speed	25/30fps : Auto(1/30,000~x8sec), Manual 50/60fps : Auto(1/50,000~x8sec), Manual		
IR Illuminator	Quantity	Synchronized IR LED, Fixed IR LED	
	Angle	5~60°	
	Distance	Up to 200m	
VIDEO/AUDIO			
Compression	H.264(Baseline, Main, High Profile), MJPEG		
Bitrate Control	CVBR, VBR		
Resolution	1920x1080, 1280x1024, 1280x720/960, 704x480/576, 640x360/480, 320x240		
Frame Rate	Max. 50/60fps		
Streaming	50/60fps(Dual Stream : H.264x1, MJPEGx1) 25/30fps(Triple Stream : H.264x2, MJPEGx1)		
Audio Compression	G.711		
Audio Streaming	2 Way		
PTZ FUNCTION			
Pan Range	360° Endless		
Pan Speed	Max. 380°/sec.(Preset)		
Tilt Range	-10~90°		
Tilt Speed	Max. 380°/sec.(Preset)		
Preset	256		
Tour	8		
Pattern	8		
Home Function	Yes		
SYSTEM			
Video Contents Analysis	DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector		
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)		
Privacy Masking	16 Programmable Zone		
FTP Uploading	MJPEG		
Event Notification	E-mail, FTP, Notification Server, XML Notification, Audio Alert, AIHM		
Audio Alert	User-Defined 3 Audio Files		
Login Authority	Administrator, Operator, Guest		
Event Buffering	FTP SD Record	Pre : 30sec, Post : 30sec	
		Pre : 10sec, Post : 60sec	
Manual Trigger	4 Programmable Trigger		
Security	Multi User Authority, IP Filtering, HTTPS, SSL		
Network Time Sync	NTP Server, Synchronized Computer, Manual		
Software Reset	Restart, Reset, Factory Default		
Hardware Factory Reset	Yes		
Auto Recovery	Backup, Restore		
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager, NC-Titanium		
SD Recording Mode	Event, Continuous		
NETWORK			
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour		
Client Software	Web, SmartManager, NC-Titanium, Tive HD		
Max. User Connection	Live : 10 Users, Playback : 3 Users		
API Support	Open API, Onvif Compliance		
Mobile Support	Tive HD(Android, iOS)		
EXTERNAL IN/OUT			
Audio	1 Input, 1 Output(RCA Mono Jack)		
Alarm	4 Input, 1 Output		
Ethernet	RJ-45(10/100Base-T)		
u-SD Card	SDHC(Max. 32GB)		
ETC			
Operating Humidity	0~90% RH(Non-Condensing)		
Operating Temperature	-30~+65 °C		-40~+65 °C
Power Supply	PoE(Injector), 12VDC		24VAC
Power Consumption	500mA(28W)@PoE 2.3A(28W)@12VDC		2.6A(38W)@24VAC
Dimension	201.8(Ø)x313(H)mm		
Net Weight	Approx. 4.9kg		
Ingress Protection	IP66		

Specifications are subject to change without notice.



NFX-22153H3

30X 2MP IR Fastrax Network Camera

Key Features

- 1/1.9" Sony Exmor CMOS Sensor
- 2MP Resolution with Compact Design
- Optical Zoom 30X, Digital Zoom 16X
- Synchronized IR LED & Fixed IR LED
- IR Distance up to 300m
- 3DNR, True Day & Night, True WDR
- Preset(256), Tour(8), Pattern(8), Privacy(16), Motion(16)
- Alarm Input(4), Alarm Output(1), Audio Input(1), Audio Output(1)
- VCA(DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector)
- SD Card Up to 32GB
- PoE, 12VDC, IP66

Technical Specifications

Model		NFX-22153H3	
IMAGE			
Lens		Optical Zoom 30X, 6.0~180.0mm	
Angle of View		58~3.1°(H)	
Image Sensor	Type	1/1.9" SONY Exmor CMOS Sensor	
	Pixels	1945(H)x1225(V)	
Min. Illumination		Color : 0.1Lux / BW : 0Lux(IR LED On)	
Scanning Mode		Progressive Scan	
Wide Dynamic Range		True WDR	
Day and Night Mode		True Day & Night	
Noise Reduction		3DNR	
Digital Zoom		16X	
Exposure Control		Auto, Manual, Shutter Priority, Iris Priority	
White Balance Control		Auto, Fluorescent, Incandescent, Outdoor, Manual	
Back Light Compensation		Yes	
Image Effect		Flip(Digital)	
Shutter Speed		25/30fps : Auto(1/30,000~x8sec), Manual 50/60fps : Auto(1/50,000~x8sec), Manual	
IR Illuminator	Quantity	Synchronized IR LED, Fixed IR LED	
	Angle	5~60°	
	Distance	Up to 300m	
VIDEO/AUDIO			
Compression		H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control		CVBR, VBR	
Resolution		1920x1080, 1280x1024, 1280x720/960, 704x480/576, 640x360/480, 320x240	
Frame Rate		Max. 50/60fps	
Streaming		50/60fps(Dual Stream : H.264x1, MJPEGx1), 25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Audio Compression		G.711	
Audio Streaming		2 Way	
PTZ FUNCTION			
Pan Range		360° Endless	
Pan Speed		Max. 380°/sec.(Preset)	
Tilt Range		-10~90°	
Tilt Speed		Max. 380°/sec.(Preset)	
Preset		256	
Tour		8	
Pattern		8	
Home Function		Yes	
SYSTEM			
Video Contents Analysis		DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector	
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Masking		16 Programmable Zone	
FTP Uploading		MJPEG	
Event Notification		E-mail, FTP, Notification Server, XML Notification, Audio Alert, AIHM	
Audio Alert		User-Defined 3 Audio files	
Login Authority		Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec	
	SD Record	Pre : 10sec, Post : 60sec	
Manual Trigger		4 Programmable Trigger	
Security		Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync		NTP Server, Synchronized Computer, Manual	
Software Reset		Restart, Reset, Factory Default	
Hardware Factory Reset		Yes	
Auto Recovery		Backup, Restore	
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode		Event, Continuous	
NETWORK			
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software		Web, SmartManager, NC-Titanium, Tive HD	
Max. User Connection		Live : 10 Users, Playback : 3 Users	
API Support		Open API, Onvif Compliance	
Mobile Support		Tive HD(Android, iOS)	
EXTERNAL IN/OUT			
Audio		1 Input, 1 Output(RCA Mono Jack)	
Alarm		4 Input, 1 Output	
Ethernet		RJ-45(10/100Base-T)	
u-SD Card		SDHC(Max. 32GB)	
ETC			
Operating Humidity		0~90% RH(Non-Condensing)	
Operating Temperature		-30~+65 °C	
Power Supply		PoE (Injector), 12VDC	
Power Consumption		500mA(28W)@PoE 2.3A(28W)@12VDC	
Dimension		201.8(Ø)x317.8(H)mm	
Net Weight		Approx. 5.1kg	
Ingress Protection		IP66	

Key Functions

- Hitron Low Light Enhancement Technology 'DarkBuster'
- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MPEG4, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

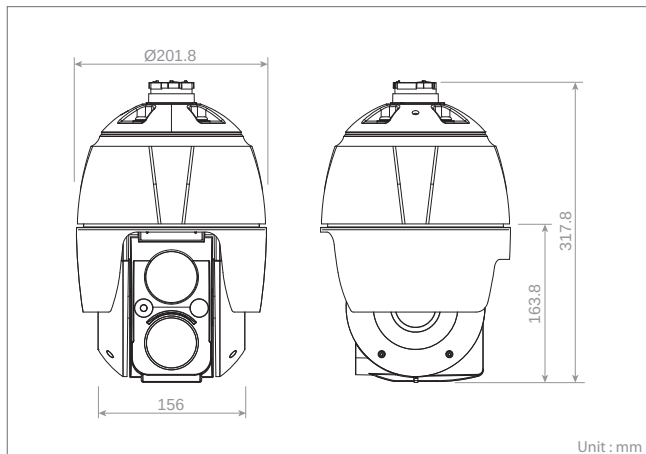
Software

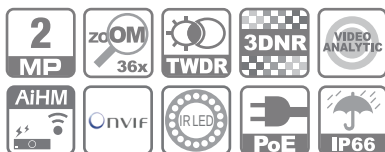
- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB241(Housing Ceiling Bracket)
- HDB242E(Housing Wall Bracket)

Dimension





Key Functions

- Hitron Low Light Enhancement Technology 'DarkBuster'
- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event

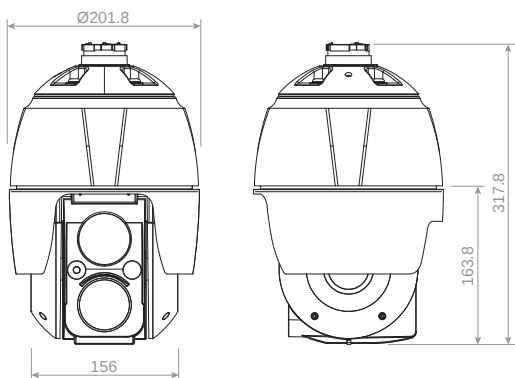
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB241(Housing Ceiling Bracket)
- HDB242E(Housing Wall Bracket)

Dimension



NFX-22154H3L

36X 2MP Laser IR Network Speed Dome Camera

Key Features

- 2MP Resolution
- Optical Zoom 36X, Digital Zoom 16X
- Long Range Laser IR LED with Synchronization(up to 500m)
- True WDR(120dB), True Day & Night
- Max. 380°/sec Speed(Preset)
- Preset(256), Tour(8), Pattern(8), Privacy(16), Motion(16)
- Alarm In/Out(1/1), Audio In/Out(1/1)
- VCA(DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector)
- Micro SD Card Up to 32GB
- PoE, 12VDC
- IP66

Technical Specifications

Model		NFX-22154H3L	
IMAGE			
Lens		Optical Zoom 36X, 6.0~216mm	
Angle of View		58~2.6°(H)	
Image Sensor	Type	1/1.9" SONY Exmor CMOS Sensor	
	Pixels	1945(H)x1225(V)	
Min. Illumination		Color : 0.1Lux / BW : 0.1Lux(IR LED On)	
Scanning Mode		Progressive Scan	
Wide Dynamic Range		True WDR(120dB)	
Day and Night Mode		True Day & Night(Auto, Day, Night)	
Noise Reduction		3DNR	
Digital Zoom		16X	
Exposure Control		Auto, Manual, Shutter Priority, Iris Priority	
White Balance Control		Auto, Fluorescent, Incandescent, Outdoor, Manual	
Back Light Compensation		Yes	
Image Effect		Flip(Digital)	
Shutter Speed		25/30fps : Auto(1/30,000~x8sec), Manual 50/60fps : Auto(1/50,000~x8sec), Manual	
IR Illuminator	Quantity	Synchronized Laser IR, Fixed IR LED	
	Angle	1.4~60°	
	Distance	Up to 500m	
VIDEO/AUDIO			
Compression		H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control		CVBR, VBR	
Resolution		1920x1080, 1280x1024, 1280x720/960, 704x480/576, 640x360/480, 320x240	
Frame Rate		Max. 50/60fps	
Streaming		50/60fps(Dual Stream : H.264x1, MJPEGx1), 25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Audio Compression		G.711	
Audio Streaming		2 Way	
PTZ FUNCTION			
Pan Range		360° Endless	
Pan Speed		Max. 380°/sec.(Preset)	
Tilt Range		-10~90°	
Tilt Speed		Max. 380°/sec.(Preset)	
Preset		256	
Tour		8	
Pattern		8	
Home Function		Yes	
SYSTEM			
Video Contents Analysis		DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector	
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Masking		16 Programmable Zone	
FTP Uploading		MJPEG	
Event Notification		E-mail, FTP, Notification Server, XML Notification, Audio Alert, AIHM	
Audio Alert		User-Defined 3 Audio files	
Login Authority		Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec	
	SD Record	Pre : 10sec, Post : 60sec	
Manual Trigger		4 Programmable Trigger	
Security		Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync		NTP Server, Synchronized Computer, Manual	
Software Reset		Restart, Reset, Factory Default	
Hardware Factory Reset		Yes	
Auto Recovery		Backup, Restore	
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode		Event, Continuous	
NETWORK			
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software		Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection		Live : 10 Users, Playback : 3 Users	
API Support		Open API, Onvif Compliance	
Mobile Support		Android, iOS	
EXTERNAL IN/OUT			
Audio		1 Input, 1 Output(RCA Mono Jack)	
Alarm		4 Input, 1 Output	
Ethernet		RJ-45(10/100Base-T)	
u-SD Card		SDHC(Max. 32GB)	
ETC			
Operating Humidity		0~90% RH(Non-Condensing)	
Operating Temperature		-30~+50 °C	
Power Supply		PoE(Injector), 12VDC	
Power Consumption		690mA(38W)@PoE 3A(36W)@12VDC	
Dimension		201.8(Ø)x317.8(H)mm	
Net Weight		Approx. 5.2kg	
Ingress Protection		IP66	

Specifications are subject to change without notice.

SPECIALTY CAMERA

Model	Type	Image	Key SPEC							
			Codec	Sensor	Lens	Min. Illumination	AE	IR (Distance)	Ingress Protection	Page
NEX-3285	2M Mini Box		H.264	1/2.8" CMOS	4.3mm Pin Hole	0.1Lux	TWDR	-	-	p.56
NEX-3295	2M Mini Box		H.264	1/2.8" CMOS	C/CS Mount	0.01Lux	TWDR	-	-	p.57
NHX-3281	2M Strip		H.264	1/2.8" CMOS	4.3mm Pin Hole	0.5Lux	TWDR	-	-	p.58
NAX-2210D1	2M LPC		H.264	1/2.8" CMOS	5.1~51mm AF	0Lux	-	32EA (25m)	IP66	p.59
NEX-2202R	2M VP		H.264	1/2.8" CMOS	2.9mm Fixed	0Lux	TWDR	12EA (15m)	IP67	p.60
NEX-6302R	3M VP		H.264	1/2.8" CMOS	2.9mm Fixed	0Lux	DWDR	12EA (15m)	IP67	p.61
NDX-6536	5M Fisheye		H.264	1/1.8" CMOS	1.05mm Fisheye	0.07Lux	DWDR	-	-	p.62



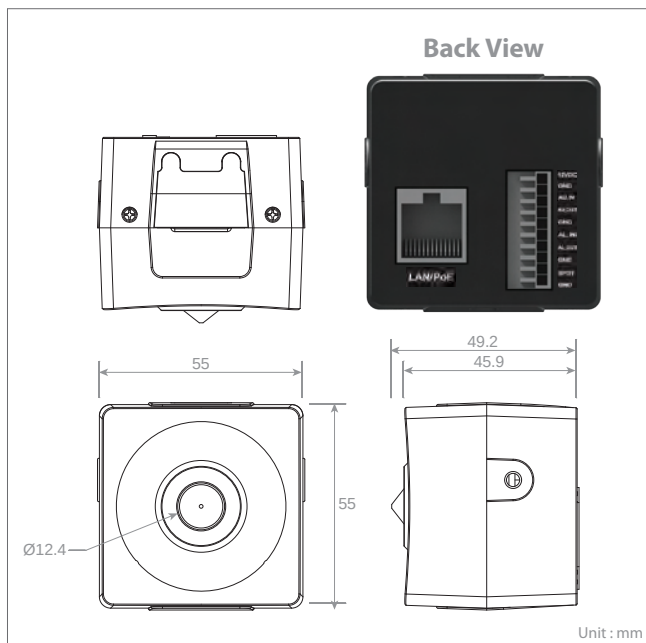
Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



NEX-3285

Professional 2MP Miniature Square Camera

Key Features

- 2MP Resolution, 50/60fps
- 4.3mm Fixed-focal Pin Hole Lens
- True WDR(120dB)
- Composite Video Output
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card up to 32GB
- PoE, 12VDC

Technical Specifications

Model	NEX-3285	
IMAGE		
Lens	Fixed-focal 4.3mm Pin Hole, F2.0	
Angle of View	75°(H)	
Image Sensor	Type	1/2.8" SONY Exmor CMOS Sensor
	Pixels	1944(H)x1224(V)
Min. Illumination	Color : 0.1Lux@F2.0, 50IRE	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	True WDR(120dB)	
Day and Night Mode	-	
Noise Reduction	3DNR	
Digital Zoom	16X	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Aisle	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 50/60fps	
Streaming	50/60fps(Dual Stream : H.264x1, MJPEGx1) 25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Composite Out	Yes	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Video Contents Analysis	DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, NC-Titanium, Tive HD	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Tive HD(Android, iOS)	
EXTERNAL IN/OUT		
Video Composite Out	1 Output(EXT. Cable)	
Audio	1 Input, 1 Output(EXT. Cable)	
Alarm	1 Input, 1 Output(EXT. Cable)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC(Max. 32GB)	
RS485	-	
OSD Remote Control	-	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-10~+50 °C	
Power Supply	PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption	5.5W@PoE / 5.0W@12VDC	
Dimension	55(W)x55(H)x49.2(D)	
Net Weight	Approx. 155g	

Specifications are subject to change without notice.



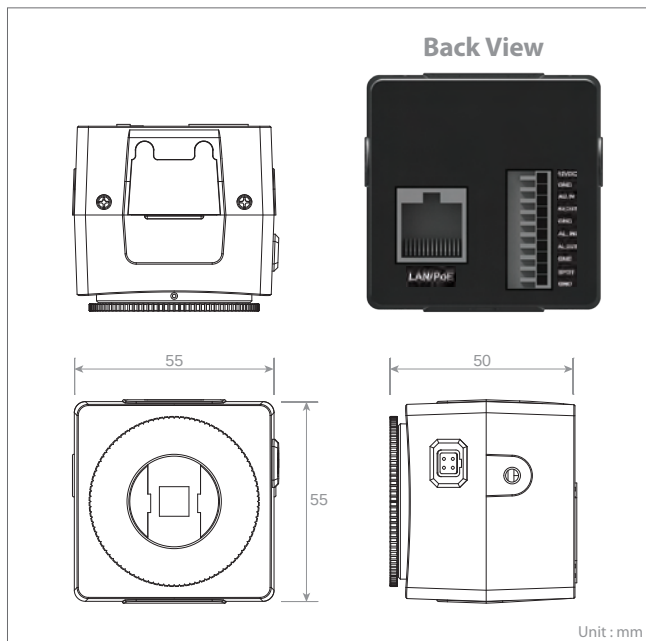
Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



NEX-3295

Professional 2MP Miniature Square Camera

Key Features

- 2MP Resolution, 50/60fps
- C/CS Mount Lens Available(Lens Not Included)
- True WDR(120dB)
- Composite Video Output
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card up to 32GB
- PoE, 12VDC

Technical Specifications

Model	NEX-3295	
IMAGE		
Lens	C/CS Mount	
Angle of View	-	
Image Sensor	Type	1/2.8" SONY Exmor CMOS Sensor
	Pixels	1944(H)x1224(V)
Min. Illumination	Color : 0.1Lux / BW : 0.01Lux@F2.0, 50IRE	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	True WDR(120dB)	
Day and Night Mode	True Day & Night	
Noise Reduction	3DNR	
Digital Zoom	16X	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Aisle	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 50/60fps	
Streaming	50/60fps(Dual Stream : H.264x1, MJPEGx1) 25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Composite Out	Yes	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Video Contents Analysis	DIS, Defog, Face Detector, Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, NC-Titanium, Tive HD	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Tive HD(Android, iOS)	
EXTERNAL IN/OUT		
Video Composite Out	1 Output(EXT. Cable)	
Audio	1 Input, 1 Output(EXT. Cable)	
Alarm	1 Input, 1 Output(EXT. Cable)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC(Max. 32GB)	
RS485	-	
OSD Remote Control	-	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-10~+50℃	
Power Supply	PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption	5.5W@PoE / 5.0W@12VDC	
Dimension	55(W)x55(H)x50(D)	
Net Weight	Approx. 155g	

Specifications are subject to change without notice.



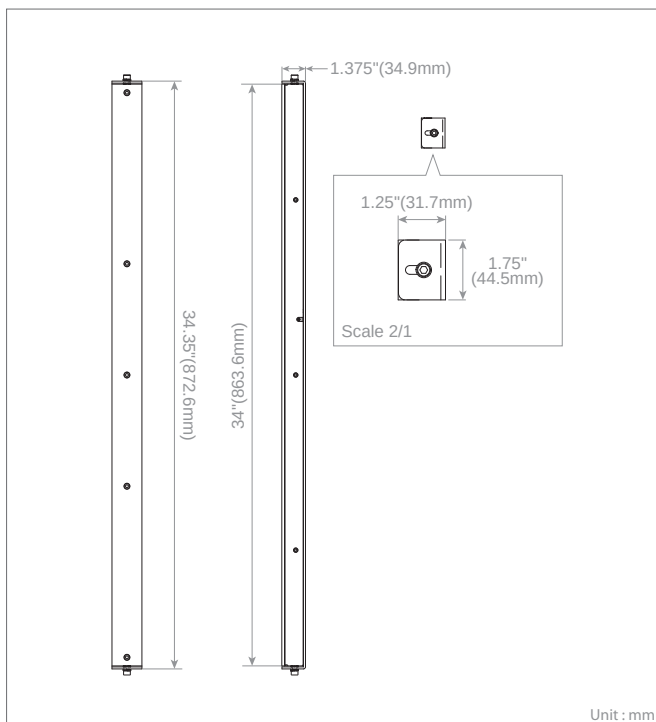
Key Functions

- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- Digital Image Stabilization, Defog
- Video Contents Analysis(Face Detection, Line Detector, Field Detector)

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



NHX-3281

2MP HD Height Strip Network Camera

Key Features

- Eye Level Height Camera
- 2MP Resolution
- 4.3mm Pin Hole Lens
- True WDR(120dB)
- Micro SD Card up to 32GB
- PoE, 12VDC

Technical Specifications

Model	NHX-3281	
IMAGE		
Lens	Fixed 4.3mm Pin Hole, F2.0	
Angle of View	75°(H)	
Image Sensor	Type	1/2.8" SONY Exmor CMOS Sensor
	Pixels	2000(H)x1241(V)
Min. Illumination	Color : 0.5Lux@F2.0 50IRE	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	True WDR(120dB)	
Day and Night Mode	-	
Noise Reduction	2DNR, 3DNR	
Digital Zoom	Yes(ROI)	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor, Manual	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Aisle, Defog, DIS	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 50/60fps	
Streaming	50/60fps(Dual Stream : H.264x1, MJPEGx1) 25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Composite Out	Yes	
Audio Compression	-	
Audio Streaming	-	
SYSTEM		
Video Contents Analysis	Face Detector, Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert	-	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTPC, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	-	
Audio	-	
Alarm	-	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC(Max. 32GB)	
RS485	-	
OSD Remote Control	-	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-10~+50℃	
Power Supply	PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption	80mA(3.9W)@PoE / 250mA(W)@12VDC	
Dimension	44.5(W) x 872(H) x 34.9(D)mm	
Net Weight	Approx. 1440g	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- AiHM Event
- Event Buffering
- Built-in Heater(PoE+ or 12VDC)

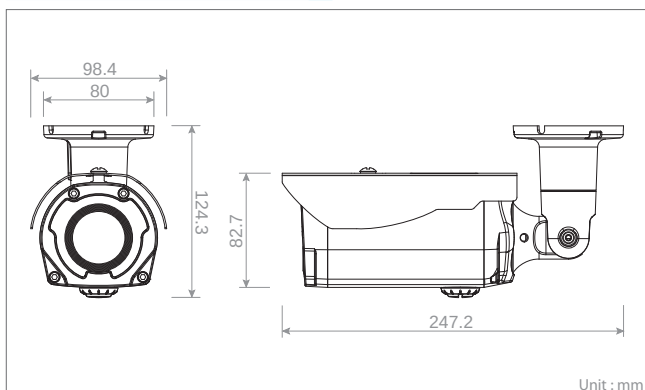
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HJB200(Junction Box)

Dimension



NAX-2210D1

10X 2MP License Plate Capture Network Camera

Key Features

- 2MP Resolution, 50/60fps
- 5.1~51mm 10x AF Optical Zoom Lens
- Multi-Shutter
- 32 IR LEDs for 25m Coverage
- Audio In/Out(1/1), Alarm In/Out(1/1)
- SD Card Up to 32GB
- PoE+, 12VDC
- IP66

Technical Specifications

Model	NAX-2210D1	
IMAGE		
Lens	Optical Zoom 10X, 5.1~51mm	
Angle of View	54~4.9°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor
	Pixels	1945(H)x1097(V)
Scanning Mode	Progressive Scan	
Noise Reduction	3DNR	
Digital Zoom	16X	
Exposure Control	Multi-Shutter	
Shutter Speed	25/30fps : Auto(1/30,000~x8sec), Manual 50/60fps : Auto(1/50,000~x8sec), Manual	
IR Illuminator	Quantity	32 IR LEDs
	Angle	78°(H)
	Distance	Up to 25m
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	1920x1080, 1280x1024, 1280x720/960, 1024x768, 704x480/576, 640x360/480, 320x240	
Frame Rate	Max. 50/60fps	
Streaming	50/60fps(Dual Stream : H.264x1, MJPEGx1) 25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Audio Compression	G.711	
Audio Streaming	2 Way	
PTZ FUNCTION		
Preset	32	
SYSTEM		
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, Audio Alert, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager, NC-Titanium	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, NC-Titanium, Tive HD	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Tive HD(Android, iOS)	
EXTERNAL IN/OUT		
Audio	1 Input, 1 Output(Terminal Block)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC(Max. 32GB)	
ETC		
Operating Humidity	0~90% RH(Non-Condensing)	
Operating Temperature	-30~+50 °C	
Power Supply	PoE(IEEE802.3at, Class4 Only), 12VDC	
Power Consumption	0.47A(22.6W)@PoE with Heater, 1.6A(19.2W)@12VDC with Heater	
Dimension	98.4(W)x124.3(H)x247.2(D)mm	
Net Weight	Approx. 1200g	
Ingress Protection	IP66	

Specifications are subject to change without notice.



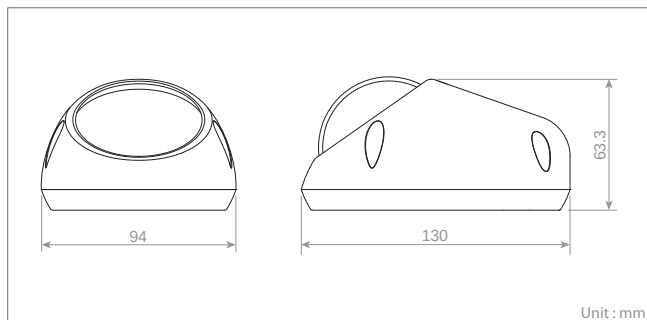
Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



NEX-2202R

2MP IR Vandal Network Camera

Key Features

- 2MP Resolution, 50/60fps
- Fixed 2.9mm Wide Angle Lens
- True Day & Night
- True WDR(120dB)
- 12 IR LEDs for 15m Coverage
- Built in Mic
- Micro SD Card up to 32GB
- PoE, 12VDC
- IP67

Technical Specifications

Model		NEX-2202R
IMAGE		
Lens		Fixed 2.9mm, F2.0
Angle of View		115.0°(H)~65.0°(V)
Image Sensor	Type	1/2.8" SONY Exmor CMOS Sensor
	Pixels	1944(H)x1224(V)
Min. Illumination		Color : 0.2Lux@F2.0, BW : 0Lux(IR LED On)
Scanning Mode		Progressive Scan
Wide Dynamic Range		True WDR(120dB)
Day and Night Mode		True Day & Night(Auto, Day, Night)
Noise Reduction		3DNR
Digital Zoom		16X
Exposure Control		Auto
White Balance Control		Auto, Incandescent, Fluorescent, Outdoor
Back Light Compensation		Yes
Image Effect		Flip, Mirror, Aisle
Flicker Free Mode		50Hz, 60Hz
Shutter Speed		Auto(1/10,000~1sec), Manual
IR Illuminator	Quantity	12 IR LEDs
	Angle	80°(H)
	Distance	Up to 15m
VIDEO/AUDIO		
Compression		H.264(Baseline, Main, High Profile), MJPEG
Bitrate Control		CVBR, VBR
Resolution		1920x1080, 1280x1024, 1280x720/960, 1280x768, 704x480/576, 640x360/480, 320x240
Frame Rate		Max. 50/60fps
Streaming		50/60fps(Dual Stream : H.264x1, MJPEGx1) 25/30fps(Triple Stream : H.264x2, MJPEGx1)
Audio Compression		G.711
Audio Streaming		1 Way
SYSTEM		
Video Contents Analysis		DIS, Defog, Face Detector, Tempering, Line Detector, Field Detector
Motion Detection Area		16 Programmable Area(Include Area 8, Exclude Area 8)
Privacy Mask Zone		8 Programmable Zone
FTP Uploading		MJPEG
Event Notification		E-mail, FTP, Notification Server, XML Notification
Login Authority		Administrator, Operator, Guest
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger		4 Programmable Trigger
Security		Multi User Authority, IP Filtering, HTTPS, SSL
Network Time Sync		NTP Server, Synchronized Computer, Manual
Software Reset		Restart, Reset, Factory Default
Hardware Factory Reset		Yes
Auto Recovery		Backup, Restore
Remote Upgrade		Web Browsing(IE, Chrome, Safari, Firefox), SmartManager
SD Recording Mode		Event, Continuous
NETWORK		
Protocol		TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour
Client Software		Web, SmartManager, Client S/W, Mobile S/W
Max. User Connection		Live : 10 Users, Playback : 3 Users
API Support		Open API, Onvif Compliance
Mobile Support		Android, iOS
EXTERNAL IN/OUT		
Audio		1 Input(Mic)
Ethernet		RJ-45(10/100Base-T)
u-SD Card		SDHC(Max. 32GB)
ETC		
Operating Humidity		0~90%RH(Non-Condensing)
Operating Temperature		-20~+50 °C
Power Supply		PoE(IEEE802.3 af Compliance, Class0), 12VDC
Power Consumption		5.3W@PoE, 4.6W@12VDC
Dimension		94(W)x63.3(H)x130(D)mm
Net Weight		450g
Ingress Protection		IP67

Specifications are subject to change without notice.



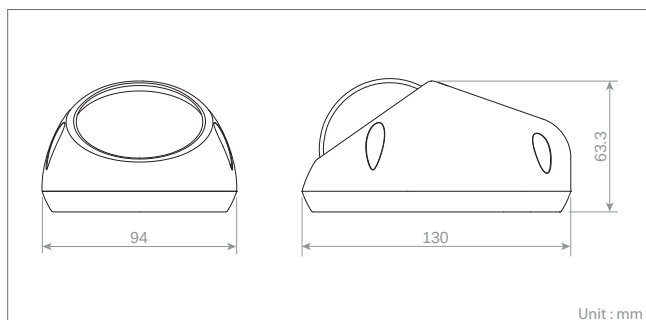
Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



NEX-6302R

3MP IR Network Camera

Key Features

- 3M Resolution 25/30fps
- Fixed 2.9mm Wide Angle Lens
- True Day & Night
- D-WDR(ATR-EX)
- 12 IR LEDs for 15m Coverage
- Built in Mic
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC
- IP67

Technical Specifications

Model	NEX-6302R	
IMAGE		
Lens	Fixed 2.9mm, F2.0	
Angle of View	115.0°(H)~65.0°(V)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor
	Pixels	2065(H)x1553(V)
Min. Illumination	Color : 0.2Lux@F2.0, BW : 0Lux(IR LED On)	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	D-WDR(ATR-EX)	
Day and Night Mode	True Day & Night(Auto, Day, Night)	
Noise Reduction	3DNR	
Digital Zoom	16X	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Aisle, Defog, HLC, S-LDC	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
IR Illuminator	Quantity	12 IR LEDs
	Angle	80°(H)
	Distance	Up to 15m
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	2048x1536, 1920x1080, 1280x720/1024, 704x480/576, 640x480, 352x240/288, 320x240	
Frame Rate	Max. 25/30fps@3MP	
Streaming	25/30fps(Triple Stream : H.264x2, MJPEGx1)	
Audio Compression	G.711	
Audio Streaming	1 Way	
SYSTEM		
Video Contents Analysis	Tampering, Line Detector, Field Detector	
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP SD Record	Pre : 30sec, Post : 30sec
		Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Audio	1 Input(Mic)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC, SDXC	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-20~+50 °C	
Power Supply	PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption	5.3W@PoE, 4.6W@12VDC	
Dimension	94(W)x63.3(H)x130(D)mm	
Net Weight	450g	
Ingress Protection	IP67	

Specifications are subject to change without notice.



Key Functions

- Auto Exposure, Auto White Balance
- Triple Stream(H.264, MJPEG)
- Onvif Profile S
- Easy Install : Zero Configuration, Discovery, PoE
- Event Boosting, FTP Image Upload, Web Casting, Open VPN, QoS, IP Filtering
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- AIHM Event
- Event Buffering

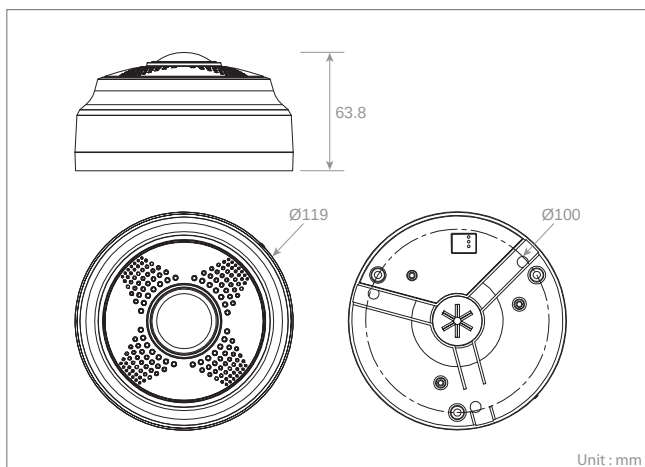
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HDB344(Wall Mount)

Dimension



NDX-6536

5MP Professional Indoor Fisheye Dome Network Camera

Key Features

- 5MP Resolution 12.5/15fps
- Fixed 1.05mm Lens
- True Day & Night
- D-WDR(ATR-EX)
- Audio In/Out(1/1), Alarm In/Out(1/1)
- Micro SD Card(SDHC, SDXC)
- PoE, 12VDC

Technical Specifications

Model	NDX-6536	
IMAGE		
Lens	Fixed 1.05mm, F2.8	
Angle of View	180°(H)x180°(V)	
Image Sensor	Type	1/1.8" SONY STARVIS CMOS Sensor
	Pixels	3096(H)x2080(V)
Min. Illumination	Color:0.3Lux@F2.8 / BW:0.07Lux@F2.8	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	D-WDR(ATR-EX)	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	3DNR	
Digital Zoom	16X	
Exposure Control	Auto	
White Balance Control	Auto, Incandescent, Fluorescent, Outdoor	
Back Light Compensation	Yes	
Image Effect	Flip, Mirror, Defog, HLC	
Flicker Free Mode	50Hz, 60Hz	
Shutter Speed	Auto(1/10,000~1sec), Manual	
VIDEO/AUDIO		
Compression	H.264(Baseline, Main, High Profile), MJPEG	
Bitrate Control	CVBR, VBR	
Resolution	2592x1944, 2048x1536, 1944x1444, 1440x1440, 1280x1024, 1280x960, 1024x1024, 1024x768, 720x720, 704x576, 640x480, 480x480	
Frame Rate	Max. 12.5/15fps@5MP	
Streaming	12.5/15fps(Triple Stream : H.264x2, MJPEGx1)	
Composite Out	-	
Audio Compression	G.711	
Audio Streaming	2 Way	
SYSTEM		
Motion Detection Area	16 Programmable Area(Include Area 8, Exclude Area 8)	
Privacy Mask Zone	8 Programmable Zone	
FTP Uploading	MJPEG	
Event Notification	E-mail, FTP, Notification Server, XML Notification, AIHM	
Audio Alert	User-Defined 3 Audio Files	
Login Authority	Administrator, Operator, Guest	
Event Buffering	FTP	Pre : 30sec, Post : 30sec
	SD Record	Pre : 10sec, Post : 60sec
Manual Trigger	4 Programmable Trigger	
Security	Multi User Authority, IP Filtering, HTTPS, SSL	
Network Time Sync	NTP Server, Synchronized Computer, Manual	
Software Reset	Restart, Reset, Factory Default	
Hardware Factory Reset	Yes	
Auto Recovery	Backup, Restore	
Remote Upgrade	Web Browsing(IE, Chrome, Safari, Firefox), SmartManager	
SD Recording Mode	Event, Continuous	
NETWORK		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour	
Client Software	Web, SmartManager, Client S/W, Mobile S/W	
Max. User Connection	Live : 10 Users, Playback : 3 Users	
API Support	Open API, Onvif Compliance	
Mobile Support	Android, iOS	
EXTERNAL IN/OUT		
Video Composite Out	-	
Audio	1 Input, 1 Output(Terminal Block)	
Alarm	1 Input, 1 Output(Terminal Block)	
Ethernet	RJ-45(10/100Base-T)	
u-SD Card	SDHC, SDXC	
RS485	-	
OSD Remote Control	-	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-10~+50 °C	
Power Supply	PoE(IEEE802.3af Compliance, Class0), 12VDC	
Power Consumption	110mA(5.3W)@PoE / 400mA(4.8W)@12VDC	
Dimension	119(Ø)x63.8(H)mm	
Net Weight	Approx. 270g	
Ingress Protection	-	

Specifications are subject to change without notice.

HD ANALOG BOX, BULLET, DOME CAMERA

Model	Type	Image	Key SPEC							
			Sensor	Resolution	Lens	Min. Illumination	AE	IR (Distance)	Ingress Protection	Page
HDB-N35NN(P)B8A(T)	HD BOX		1/2.9" CMOS	1920x1080	C/CS Mount	0.1Lux	DWDR	-	-	p.64
TZT-2203D1	HD AF BOX		1/2.8" CMOS	1920x1080	4.3~129mm AF	0.013Lux	TWDR	-	-	p.65
HDHI-N31NN(P)E1H8A(T)	HD Housing		1/2.9" CMOS	1920x1080	2.8~12mm Motorized	0Lux	DWDR	4EA (40m)	IP66	p.66
HDUI-N31NN(P)F3U1A(T)	HD Bullet		1/2.9" CMOS	1920x1080	3.6mm Fixed	0Lux	DWDR	24EA (25m)	IP67	p.67
HDUI-N31NN(P)V2U2A(T)	HD Bullet		1/2.9" CMOS	1920x1080	2.8~12mm Varifocal	0Lux	DWDR	30EA (30m)	IP67	p.68
HDUI-N31NN(P)V2U5A(T)	HD Bullet		1/2.9" CMOS	1920x1080	2.8~12mm Varifocal	0Lux	DWDR	42EA (40m)	IP66	p.69
HDUI-N31NN(P)E1U5A(T)	HD Bullet		1/2.9" CMOS	1920x1080	2.8~12mm Motorized	0Lux	DWDR	42EA (40m)	IP66	p.70
HDUI-E35NN(P)E1U5A(T)	HD Bullet		1/2.9" CMOS	1920x1080	2.8~12mm Motorized	0Lux	TWDR	42EA (40m)	IP66	p.71
HDGI-N31NN(P)F3A32A(T)	HD Dome		1/2.9" CMOS	1920x1080	3.6mm Fixed	0Lux	DWDR	24EA (25m)	-	p.72
HDGI-N31NN(P)V2A32A(T)	HD Dome		1/2.9" CMOS	1920x1080	2.8~12mm Varifocal	0Lux	DWDR	28EA (25m)	-	p.73
HDGI-N31NN(P)E1A0A(T)	HD Dome		1/2.9" CMOS	1920x1080	2.8~12mm Motorized	0Lux	DWDR	28EA (25m)	-	p.74
HDGI-N31NN(P)F3S22A(T)	HD VP		1/2.9" CMOS	1920x1080	3.6mm Fixed	0Lux	DWDR	24EA (25m)	IP66	p.75
HDGI-N31NN(P)V2S22A(T)	HD VP		1/2.9" CMOS	1920x1080	2.8~12mm Varifocal	0Lux	DWDR	24EA (25m)	IP66	p.76
HDGI-N31NN(P)E1S0A(T)	HD VP		1/2.9" CMOS	1920x1080	2.8~12mm Motorized	0Lux	DWDR	28EA (25m)	IP66	p.77
HDGI-N35NN(P)E1S0A(T)	HD VP		1/2.9" CMOS	1920x1080	2.8~12mm Motorized	0Lux	TWDR	28EA (25m)	IP66	p.78
TXN-320H1	HD PT Turret		1/2.9" CMOS	1920x1080	2.8~12mm Motorized	0Lux	DWDR	28EA (25m)	IP66	p.79



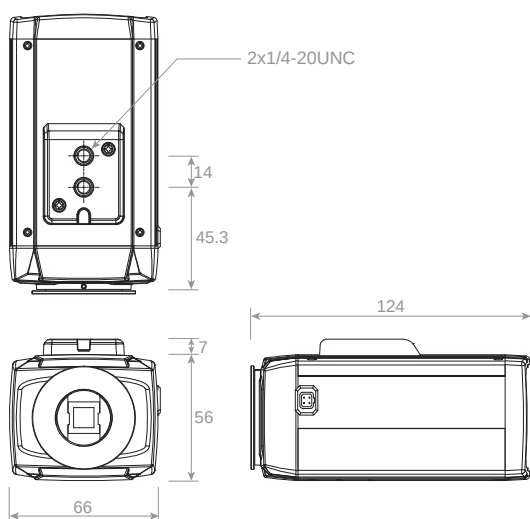
Key Functions

- AHD/TVI/CVBS Selectable
- High Speed, Long Distance Real Time Transmission
- NTSC/PAL Selectable
- Defog
- LSC(Lens Shading Correction)
- HSBLC(Hightlight Suppression BLC)
- Motion Detection
- Privacy Masking

Optional Accessory

- HCH808(Housing)
- HCS 161/170/171(Housing Bracket)
- HCS-805E/811S(Camera Bracket)

Dimension



Unit : mm

HDB-N35NN(P)B8A(T)

2MP HD Hybrid Box Camera

Key Features

- 1/2.9" 2.1M Sony Exmor CMOS Sensor
- 1920x1080p Full HD Resolution(AHD/TVI)
- Digital WDR
- Day & Night(IR Cut Filter)
- 3DNR(Digital Noise Reduction)
- Sens-up(~x30)

Technical Specifications

Model		HDB-N35NN(P)B8A(T)
POWER		
Power Source		DC12V±10%
Power Consumption		Max. 3Watts(250mA)
GENERAL		
Image Sensor		1/2.9" Sony Exmor CMOS
Total Pixels		2000(H)x1121(V)
Active Pixels		1920(H)x1080(V)
Scanning System		Progressive
Sync. System		Internal
Video Frame Rate		1920x1080p@25fps / 1920x1080p@30fps
CVBS Resolution		1000TVL
Min. Illumination		1.0Lux(Color), 0.1Lux(BW)
Video Output		BNC (AHD/TVI/CVBS Selectable)
S/N ratio		More Than 50dB(AGC Off)
Camera Control		OSD(Joystick switch)
FUNCTION		
Lens		DC/ Manual
Exposure	Shutter	Auto, 1/60(1/50), FLK~1/50,000sec
	AGC	1~15
	Sens-Up	Off/Auto(x2, x4, x6, x8, x10, x15, x20, x25, x30)
	Brightness	1~100
	DWDR	Off/On/Auto
Backlight	Defog	Off/Auto
		Off/BLC/HSBLC
	White Balance	ATW/AWC/Indoor/Outdoor/Manual/AWB
Day & Night		Auto/Color/B&W
DNR	2DNR	Off/Low/Middle/High
	3DNR	Off/Low/Middle/High
Special	Camera Title	Off/On
	D-Effect	Off/Freeze/Mirror/Neg.Image
	Motion Detection	Off/On(4 Zone)
	Privacy Masking	Off/On(4 Zone)
	Language	ENG/JPN/CHN1/CHN2/KOR/GER/FRA/ITA/SPA/POL/RUS/POR/NED/TUR/HEB/ARB
	Defect Detection	Live DPC/White DPC/Black DPC
	Sharpness	Off/Auto(0~10)
	Monitor	CRT/LCD
	LSC(Shading)	Off/On
	Video Mode	NTSC/PAL
Save & Exit		Save & Exit/No Save/Reset
CONNECTOR & ETC		
Power Input		Terminal Block
Video Output		BNC Connector
Transmission Distance		Over 500m Via 5C-2V Coaxial Cable
Auto Iris Output		4-Pin Mini Din Jack(Standard Connection)
Lens		C/CS Mount(Selected Through Back Focus)
Operating Temperature		-10~+50 °C (14~122°F)
Operating Humidity		0~96%(Non-Condensing)
External Dimension		66(W)x63(H)x124(D)mm
Weight		450g

Specifications are subject to change without notice.



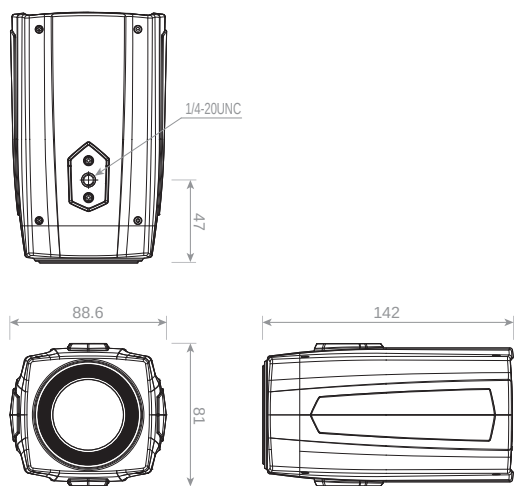
Key Functions

- AHD, HD-TVI, CVBS Selectable
- NTSC/PAL Selectable
- Preset, Tour, Home Function
- DIS(Digital Image Stabilization)
- Defog
- Coaxial Communication

Optional Accessory

- HCS805E(Box Camera Mount)
- HCS811S(Box Camera Mount)

Dimension



Unit : mm

TZT-2203D1

2MP 30x HD Hybrid Box Camera

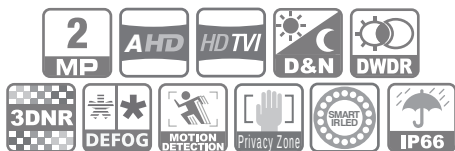
Key Features

- Hybrid HD Analog Camera : HD-TVI, AHD or CVBS
- Sony STARVIS CMOS Sensor
- 2MP Resolution(AHD)
- 30x Auto Focus Zoom Lens
- 16x Digital Zoom
- True WDR, True Day & Night
- RS485 Control Output
- Alarm In/Out(1/1)

Technical Specifications

Model	TXN-320H1	
IMAGE		
Lens	4.3~129mm 30x AF Optical Zoom	
Angle of View	61.8~2.9°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor
	Pixels	1945(H)x1097(V)
Min. Illumination	Color : 0.35Lux@50IRE / BW : 0.013Lux@50IRE	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	True WDR	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	3DNR	
Digital Zoom	16x	
Exposure Control	Auto, Manual, Shutter Priority, Iris Priority	
White Balance Control	Auto, Manual, Incandescent, Fluorescent, Outdoor	
Back Light Compensation	Yes	
Image Effect	Flip, DIS, Defog	
Shutter Speed	25/30fps : Auto(1/30,000~x8 sec), Manual 50/60fps : Auto(1/50,000~x8 sec), Manual	
VIDEO		
Resolution	HD-TVI : 1080p@25/30fps, 720p@25/30/50/60fps AHD : 1080p@25/30fps	
Video Output	HD-TVI or AHD, Composite	
FUNCTION		
Preset	240	
Tour	8	
Home Function	Yes	
Privacy Mask Zone	16 Programmable Zones	
EXTERNAL IN/OUT		
Video HD Analog Output	BNC Jack	
Video Composite Output	BNC Jack	
Alarm	1 Input, 1 Output(Terminal Block)	
Control	RS-485/422, Baud Rate : 2400~38400bps(Default : 9600bps)	
ID(Camera Address)	1~3999	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-10~+50℃	
Power Supply	12VDC	
Power Consumption	550mA(6.6W)	
Dimension	88.6(W)x81(H)x142(D)mm	
Net Weight	Approx. 600g	

Specifications are subject to change without notice.



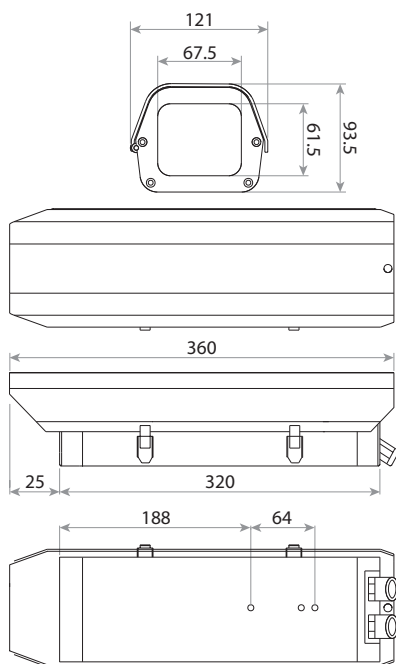
Key Functions

- AHD/TVI/CVBS Selectable
- High Speed, Long Distance Real Time Transmission
- NTSC/PAL Selectable
- Defog
- LSC(Lens Shading Correction)
- HSBLC(Hightlight Suppression BLC)
- Motion Detection
- Privacy Masking
- Coaxial Communication

Optional Accessory

- HCS161(Wall Mount)
- HCS170(Wall Mount)
- HCS171(Ceiling Mount)

Dimension



Unit : mm

HDHI-N31NN(P)E1H8A(T)

2MP HD Hybrid IR Housing Camera

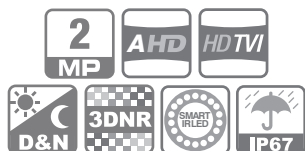
Key Features

- 1/2.9" 2.1M Sony Exmor CMOS Sensor
- 2MP Resolution(AHD/TVI)
- 2.8~12mm Motorized Varifocal Lens
- Digital WDR
- Day & Night(IR Cut Filter)
- 3DNR(Digital Noise Reduction)
- Sens-up(~x30)
- Smart IR(24 IR LEDs)
- IP66

Technical Specifications

Model		HDHI-N31NN(P)E1H8A(T)	
POWER			
Power Source		DC12V±10%	
Power Consumption		Max. 13.5Watts(1.3A) - W/O Heater, Fan Option	
GENERAL			
Image Sensor		1/2.9" Sony Exmor CMOS	
Total Pixels		2000(H)x1121(V)	
Active Pixels		1920(H)x1080(V)	
Scanning System		Progressive	
Sync. System		Internal	
Video Frame Rate		1920x1080p@25fps ; 1920x1080p@30fps	
CVBS Resolution		1000TVL	
Min. Illumination		1.0Lux(Color), 0Lux(BW, IR LED On)	
Video Output		BNC (AHD/TVI/CVBS Selectable)	
IR	IR LED	4 Power IR LEDs(85°)	
	Distance	Up to 60m	
Camera Control		OSD(Joystick switch, Coaxial Communication)	
S/N ratio		More Than 50dB(AGC Off)	
FUNCTION			
Lens		DC/ Manual	
Exposure	Shutter	Auto, 1/60(1/50), FLK~1/50,000sec	
	AGC	1~15	
	Sens-Up	Off/Auto(x2, x4, x6, x8, x10, x15, x20, x25, x30)	
	Brightness	1~100	
	DWDR	Off/On/Auto	
Backlight	Defog	Off/Auto	
		Off/BLC/HSBLC	
White Balance		ATW/AWC/Indoor/Outdoor/Manual/AWB	
Day & Night		Auto/Color/B&W	
DNR	2DNR	Off/Low/Middle/High	
	3DNR	Off/Low/Middle/High	
Special	Camera Title	Off/On	
	D-Effect	Off/Freeze/Mirror/Neg.Image	
	Motion Detection	Off/On(4 Zone)	
	Privacy Masking	Off/On(4 Zone)	
	Language	ENG/JPN/CHN1/CHN2/KOR/GER/FRA/ITA/SPA/POL/RUS/POR/NED/TUR/HEB/ARB	
	Defect Detection	Live DPC/White DPC/Black DPC	
	Sharpness	Off/Auto(0~10)	
	Monitor	CRT/LCD	
	LSC(Shading)	Off/On	
	Video Mode	NTSC/PAL	
AF	AF Mode	SEMI/Auto/Manual	
	One Shot AF	Enter	
	TDN AF	Off/On	
	Lens Initialize	Enter	
Save & Exit		Save & Exit/No Save/Reset	
CONNECTOR & ETC			
Power Input		DC Jack	
Video Output		BNC Connector(TVI/AHD/CVBS)	
Transmission Distance		Over 500m Via 5C-2V Coaxial Cable	
Lens Mount		Fixed Mount	
Lens		2 Motor, f=2.8~12mm F1.4~360 Varifocal, ICR(D&N)	
Operating Temperature		-20~+50℃ (-4~122°F)	
Operating Humidity		0~96%(Non-Condensing)	
External Dimension		121(W)x93.5(H)x360(D)mm	
Weight		Approx. 1500g	
Ingress Protection		IP66	

Specifications are subject to change without notice.



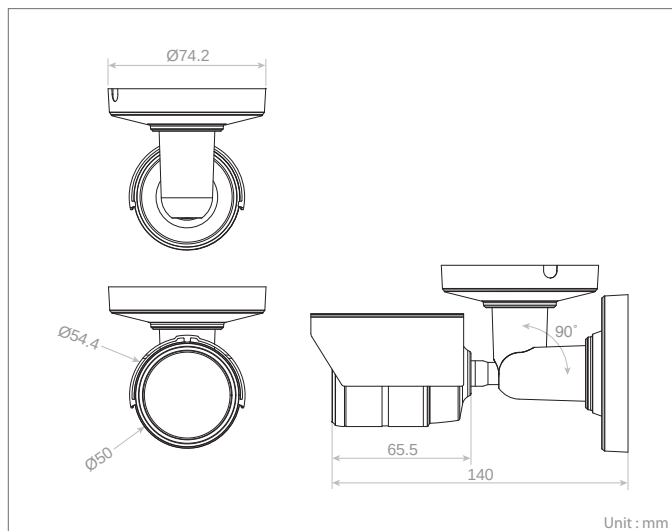
Key Functions

- AHD/TVI/CVBS Selectable
- High Speed, Long Distance Real Time Transmission
- Coaxial Communication

Optional Accessory

- HJB200(Junction Box)

Dimension



HDUI-N31NN(P)F3U1A(T)

2MP HD Hybrid IR Bullet Camera

Key Features

- 1/2.9" 2.1M Sony Exmor CMOS Sensor
- 1920x1080p Full HD Resolution(AHD/TVI)
- 3.6mm Fixed Lens
- Day & Night(IR Cut Filter)
- 3DNR(Digital Noise Reduction)
- Smart IR(24 IR LEDs)
- IP67

Technical Specifications

Model		HDUI-N31NN(P)F3U1A(T)
POWER		
Power Source		DC12V±10%
Power Consumption		Max. 4.5Watts(370mA)
GENERAL		
Image Sensor		1/2.9" Sony Exmor CMOS
Total Pixels		2,000(H)x1,121 (V)
Active Pixels		1,920(H)x1,080(V)
Scanning System		Progressive
Sync. System		Internal
Video Frame Rate		1920x1080p@25fps ; 1920x1080p@30fps
CVBS Resolution		1000TVL
Min. Illumination		1.0Lux(Color), 0Lux(BW, IR LED On)
Video Output		BNC (AHD/TVI/CVBS Selectable)
IR	IR LED	24EA IR LED(850nm)
	Distance	25M
S/N ratio		More Than 50dB(AGC Off)
Camera Control		OSD(Coaxial Communication)
FUNCTION		
Auto Exposure		On
Electronic Shutter		Auto
White Balance		ATW(Auto)
Day & Night		Auto
DNR		2D/3D On
AGC		On
Gamma		Auto
CONNECTOR & ETC		
Power Input		DC Jack
Video Output		BNC Connector
Transmission Distance		Over 500m Via 5C-2V Coaxial Cable
Lens Mount		Fixed Mount
Lens		f=3.6mm F2.0 Fixed Lens, ICR(D&N)
Operating Temperature		-20~+50 °C (-4~122°F)
Operating Humidity		0~96%(Non-Condensing)
External Dimension		Ø50(W)x140(D)mm
Weight		425g
Ingress Protection		IP67

Specifications are subject to change without notice.



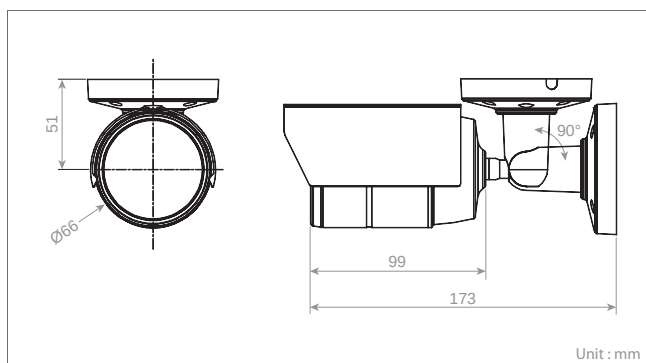
Key Functions

- AHD/TVI/CVBS Selectable
- High Speed, Long Distance Real Time Transmission
- NTSC/PAL Selectable
- Defog
- LSC(Lens Shading Correction)
- HSBLC(Hightlight Suppression BLC)
- Motion Detection
- Privacy Masking
- Coaxial Communication

Optional Accessory

- HJB200(Junction Box)

Dimension



HDUI-N31NN(P)V2U2A(T)

2MP HD Hybrid IR Bullet Camera

Key Features

- 1/2.9" 2.1M Sony Exmor CMOS Sensor
- 2MP Resolution(AHD/TVI)
- 2.8~12mm Varifocal Lens
- Digital WDR
- Day & Night(IR Cut Filter)
- 3DNR(Digital Noise Reduction)
- Sens-up(~x30)
- Smart IR(30 IR LEDs)
- IP67

Technical Specifications

Model		HDUI-N31NN(P)V2U2A(T)	
POWER			
Power Source		DC12V±10%	
Power Consumption		Max. 4.8Watts(400mA)	
GENERAL			
Image Sensor		1/2.9" Sony Exmor CMOS	
Total Pixels		2,000(H)x1,121(V)	
Active Pixels		1,920(H)x1,080(V)	
Scanning System		Progressive	
Sync. System		Internal	
Video Frame Rate		1920x1080p@25fps ; 1920x1080p@30fps	
CVBS Resolution		1000TVL	
Min. Illumination		1.0Lux(Color), 0Lux(BW, IR LED On)	
Video Output		BNC (AHD/TVI/CVBS Selectable)	
IR	IR LED	30EA IR LED(850nm)	
	Distance	30M	
S/N ratio		More Than 50dB(AGC Off)	
Camera Control		OSD(Joystick switch, Coaxial Communication)	
FUNCTION			
Lens		DC/ Manual	
		Auto, 1/60(1/50), FLK~1/50,000sec	
		1~15	
Exposure	Shutter	Off/Auto(x2, x4, x6, x8, x10, x15, x20, x25, x30)	
	AGC	1~100	
	Sens-Up	Off/On/Auto	
	Brightness	Off/Auto	
	DWDR	Off/BLC/HSBLC	
	Defog	ATW/AWC/Indoor/Outdoor/Manual/AWB	
Backlight		Auto/Color/B&W	
White Balance		Off/Low/Middle/High	
Day & Night		Off/Low/Middle/High	
DNR	2DNR	Off/On	
	3DNR	Off/Freeze/Mirror/Neg.Image	
Special	Camera Title	Off/On(4 Zone)	
	D-Effect	Off/On(4 Zone)	
	Motion Detection	Off/On(4 Zone)	
	Privacy Masking	ENG/JPN/CHN1/CHN2/KOR/GER/FRA/ITA/SPA/POL/RUS/POR/NED/TUR/HEB/ARB	
	Language	Live DPC/White DPC/Black DPC	
	Defect Detection	Off/Auto(0~10)	
	Sharpness	CRT/LCD	
	Monitor	Off/On	
	LSC(Shading)	NTSC/PAL	
	Video Mode	Off/On	
	COMET	Save & Exit/No Save/Reset	
	Save & Exit		
CONNECTOR & ETC			
Power Input		DC Jack	
Video Output		BNC Connector	
Transmission Distance		Over 500m Via 5C-2V Coaxial Cable	
Lens Mount		Fixed Mount	
Lens		f=2.8~12mm F1.2~360 Varifocal, ICR(D&N)	
Operating Temperature		-20~+50℃(-4~122°F)	
Operating Humidity		0~96%(Non-Condensing)	
External Dimension		Ø66(W)x173(D)mm	
Weight		450g	
Ingress Protection		IP67	

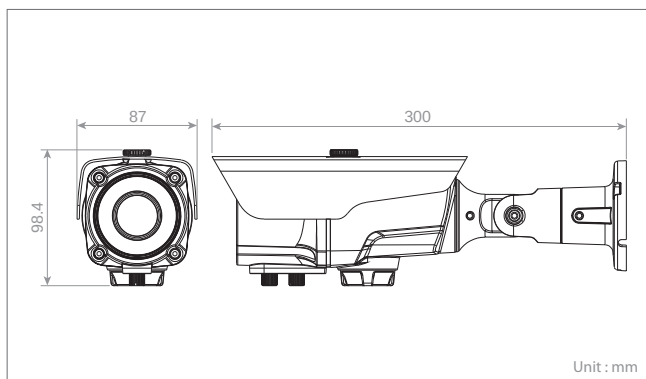
Specifications are subject to change without notice.



Key Functions

- AHD/TVI/CVBS Selectable
- High Speed, Long Distance Real Time Transmission
- NTSC/PAL Selectable
- Defog
- LSC(Lens Shading Correction)
- HSBLC(Hightlight Suppression BLC)
- Motion Detection
- Privacy Masking
- Coaxial Communication

Dimension



HDUI-N31NN(P)V2U5A(T)

2MP HD Hybrid IR Bullet Camera

Key Features

- 1/2.9" 2.1M Sony Exmor CMOS Sensor
- 2MP Resolution(AHD/TVI)
- 2.8~12mm Varifocal Lens
- Digital WDR
- Day & Night(IR Cut Filter)
- 3DNR(Digital Noise Reduction)
- Sens-up(~x30)
- Smart IR(42 IR LEDs)
- IP66

Technical Specifications

Model		HDUI-N31NN(P)V2U5A(T)	
POWER			
Power Source		DC12V±10%	
Power Consumption		Max. 6.6Watts(550mA)	
GENERAL			
Image Sensor		1/2.9" Sony Exmor CMOS	
Total Pixels		2,000(H)x1,121(V)	
Active Pixels		1,920(H)x1,080(V)	
Scanning System		Progressive	
Sync. System		Internal	
Video Frame Rate		1920x1080p@25fps ; 1920x1080p@30fps	
CVBS Resolution		1000TVL	
Min. Illumination		1.0Lux(Color), 0Lux(BW, IR LED On)	
Video Output		BNC (AHD/TVI/CVBS Selectable)	
IR	IR LED	42EA IR LED(850nm)	
	Distance	40M	
S/N ratio		More Than 50dB(AGC Off)	
Camera Control		OSD(Joystick switch, Coaxial Communication)	
FUNCTION			
Lens		DC/ Manual	
Exposure	Shutter	Auto, 1/60(1/50), FLK~1/50,000sec	
	AGC	1~15	
	Sens-Up	Off/Auto(x2, x4, x6, x8, x10, x15, x20, x25, x30)	
	Brightness	1~100	
	DWDR	Off/On/Auto	
	Defog	Off/Auto	
Backlight		Off/BLC/HSBLC	
White Balance		ATW/AWC/Indoor/Outdoor/Manual/AWB	
Day & Night		Auto/Color/B&W	
DNR	2DNR	Off/Low/Middle/High	
	3DNR	Off/Low/Middle/High	
Special	Camera Title	Off/On	
	D-Effect	Off/Freeze/Mirror/Neg.Image	
	Motion Detection	Off/On(4 Zone)	
	Privacy Masking	Off/On(4 Zone)	
	Language	ENG/JPN/CHN1/CHN2/KOR/GER/FRA/ITA/SPA/POL/RUS/POR/NED/TUR/HEB/ARB	
	Defect Detection	Live DPC/White DPC/Black DPC	
	Sharpness	Off/Auto(0~10)	
	Monitor	CRT/LCD	
	LSC(Shading)	Off/On	
	Video Mode	NTSC/PAL	
Save & Exit	COMET	Off/On	
		Save & Exit/No Save/Reset	
CONNECTOR & ETC			
Power Input		DC Jack	
Video Output		BNC Connector	
Transmission Distance		Over 500m Via 5C-2V Coaxial Cable	
Lens Mount		Fixed Mount	
Lens		f=2.8~12mm F1.2~360 Varifocal, ICR(D&N)	
Operating Temperature		-20~+50℃ (-4~122°F)	
Operating Humidity		0~96%(Non-Condensing)	
External Dimension		87(W)x98.4(H)x300(D)mm	
Weight		1000g	
Ingress Protection		IP66	

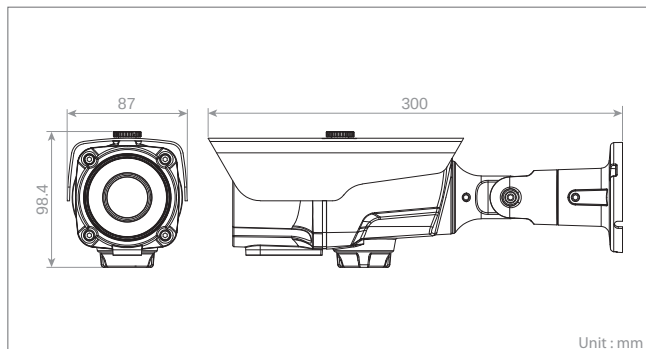
Specifications are subject to change without notice.



Key Functions

- AHD/TVI/CVBS Selectable
- High Speed, Long Distance Real Time Transmission
- NTSC/PAL Selectable
- Defog
- LSC(Lens Shading Correction)
- HSBLC(Hightlight Suppression BLC)
- Motion Detection
- Privacy Masking
- Coaxial Communication

Dimension



HDUI-N31NN(P)E1U5A(T)

2MP HD Hybrid IR Bullet Camera

Key Features

- 1/2.9" 2.1M Sony Exmor CMOS Sensor
- 2MP Resolution(AHD/TVI)
- 2.8~12mm Motorized Varifocal Lens
- Digital WDR
- Day & Night(IR Cut Filter)
- 3DNR(Digital Noise Reduction)
- Sens-up(~x30)
- Smart IR(42 IR LEDs)
- IP66

Technical Specifications

Model		HDUI-N31NN(P)E1U5A(T)	
POWER			
Power Source		DC12V±10%	
Power Consumption		Max. 6.6Watts(550mA)	
GENERAL			
Image Sensor		1/2.9" Sony Exmor CMOS	
Total Pixels		2,000(H)x1,121(V)	
Active Pixels		1,920(H)x1,080(V)	
Scanning System		Progressive	
Sync. System		Internal	
Video Frame Rate		1920x1080p@25fps ; 1920x1080p@30fps	
CVBS Resolution		1000TVL	
Min. Illumination		1.0Lux(Color), 0Lux(BW, IR LED On)	
Video Output		BNC (AHD/TVI/CVBS Selectable)	
IR	IR LED	42EA IR LED(850nm)	
	Distance	40M	
S/N ratio		More Than 50dB(AGC Off)	
Camera Control		OSD(Joystick switch, Coaxial Communication)	
FUNCTION			
Lens		DC/ Manual	
Exposure	Shutter	Auto, 1/60(1/50), FLK~1/50,000sec	
	AGC	1~15	
	Sens-Up	Off/Auto(x2, x4, x6, x8, x10, x15, x20, x25, x30)	
	Brightness	1~100	
	DWDR	Off/On/Auto	
	Defog	Off/Auto	
Backlight		Off/BLC/HSBLC	
White Balance		ATW/AWC/Indoor/Outdoor/Manual/AWB	
Day & Night		Auto/Color/B&W	
DNR	2DNR	Off/Low/Middle/High	
	3DNR	Off/Low/Middle/High	
Special	Camera Title	Off/On	
	D-Effect	Off/Freeze/Mirror/Neg.Image	
	Motion Detection	Off/On(4 Zone)	
	Privacy Masking	Off/On(4 Zone)	
	Language	ENG/JPN/CHN1/CHN2/KOR/GER/FRA/ITA/SPA/POL/RUS/POR/NED/TUR/HEB/ARB	
	Defect Detection	Live DPC/White DPC/Black DPC	
	Sharpness	Off/Auto(0~10)	
	Monitor	CRT/LCD	
	LSC(Shading)	Off/On	
	Video Mode	NTSC/PAL	
Save & Exit	COMET	Off/On	
	Save & Exit/No Save/Reset		
CONNECTOR & ETC			
Power Input		DC Jack	
Video Output		BNC Connector	
Transmission Distance		Over 500m Via 5C-2V Coaxial Cable	
Lens Mount		Fixed Mount	
Lens		f=2.8~12mm F1.2~360 Motorized Varifocal, ICR(D&N)	
Operating Temperature		-20~+50℃ (-4~122°F)	
Operating Humidity		0~96%(Non-Condensing)	
External Dimension		87(W)x98.4(H)x300(D)mm	
Weight		1000g	
Ingress Protection		IP66	

Specifications are subject to change without notice.



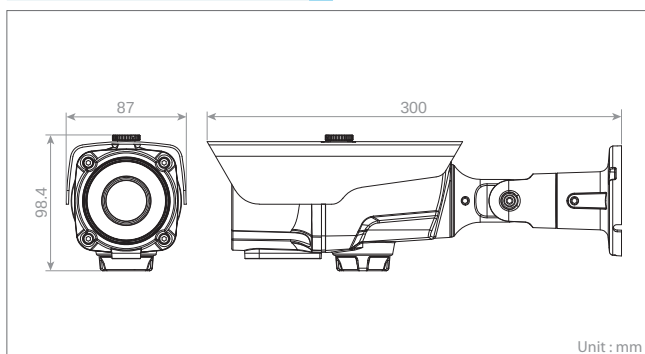
Key Functions

- AHD/TVI/CVBS Selectable
- High Speed, Long Distance Real Time Transmission
- NTSC/PAL Selectable
- Defog
- LSC(Lens Shading Correction)
- HSBLC(Hightlight Suppression BLC)
- Motion Detection
- Privacy Masking
- Coaxial Communication

Optional Accessory

- HJB200(Junction Box)

Dimension



HDUI-E35NN(P)E1U5A(T)

2MP HD Hybrid IR Bullet Camera

Key Features

- 1/2.8" Sony STARVIS CMOS Sensor
- 2MP Resolution(AHD/TVI)
- 2.8~12mm Motorized Varifocal Lens
- True WDR
- Day & Night(IR Cut Filter)
- 3DNR(Digital Noise Reduction)
- Sens-up(~x32)
- Smart IR(42 IR LEDs)
- IP66

Technical Specifications

Model	HDUI-E35NN(P)E1U5A(T)	
POWER		
Power Source	AC24V/DC12V±10%	
Power Consumption	Max. 7.5Watts(630mA)	
GENERAL		
Image Sensor	1/2.8" Sony STARVIS CMOS	
Total Pixels	1945(H)x1109(V)	
Active Pixels	1,920(H)x1,080(V)	
Scanning System	Progressive	
Sync. System	Internal	
Video Frame Rate	1920x1080p@25fps ; 1920x1080p@30fps	
CVBS Resolution	1000TVL	
Min. Illumination	0.03Lux(Color), 0Lux(BW, IR LED On)	
Video Output	BNC1(AHD/TVI/CVI) BNC2(TVI/CVBS)	
IR	IR LED	42EA IR LED(850nm)
	Distance	40M
S/N ratio	More Than 52dB(AGC Off)	
Camera Control	OSD(Joystick switch, Coaxial Communication)	
FUNCTION		
Lens	ALC / ELC	
Exposure	Shutter	Auto, FLK, Manual(1/30(25)~1/30,000)
	AGC	0~10
	Sens-Up	Off/x2, x4, x8, x16, x32
	Brightness	1~20
	DWDR	Off/Low/Middle/High
	Defog	Off/On
Backlight	Off/BLC/HSBLC/WDR	
White Balance	Auto/AUTOext/Preset/Manual	
Day & Night	Auto/Color/B&W/Ext	
DNR	Off/Low/Middle/High	
Image	Color Gain	0~20
	Sharpness	0~10
	Gamma	0.45/0.55/0.65/0.75
	Mirror	Off/On
	Flip	Off/On
	Privacy Masking	Off/On(16 Zone)
	Motion	Off/On
Frame Rate	1080 30p / 720 30p / 1080 25p / 720 25p	
Frequency	50Hz / 60Hz	
Save & Exit	Exit(Auto Save)	
CONNECTOR & ETC		
Power Input	Terminal Block	
Video Output	2 BNC Connector	
Transmission Distance	Over 500m Via 5C-2V Coaxial Cable	
Lens Mount	Fixed Mount	
Lens	f=2.8~12mm F1.2~360 Motorized Varifocal, ICR(D&N)	
Operating Temperature	-20~+50 °C (-4~122°F)	
Operating Humidity	0~96%(Non-Condensing)	
External Dimension	87(W)x98.4(H)x300(D)mm	
Weight	1000g	
Ingress Protection	IP66	

Specifications are subject to change without notice.



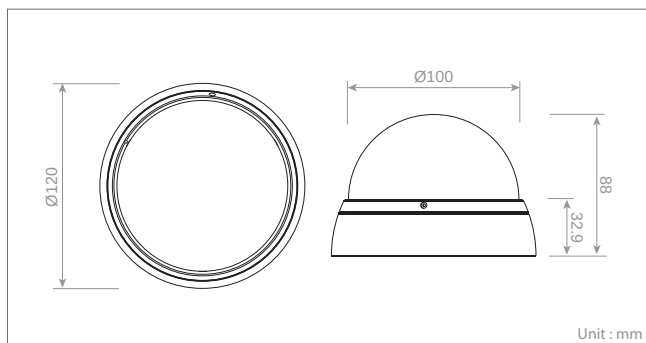
Key Functions

- AHD/TVI/CVBS Selectable
- High Speed, Long Distance Real Time Transmission
- NTSC/PAL Selectable
- Defog
- LSC(Lens Shading Correction)
- HSBLC(Hightlight Suppression BLC)
- Motion Detection
- Privacy Masking
- Coaxial Communication

Optional Accessory

- HDB344(Wall Mount)
- HDA401 (Angle Bracket)

Dimension



HDGI-N31NN(P)F3A32A(T)

2MP HD Hybrid IR Plastic Dome Camera

Key Features

- 1/2.9" 2.1M Sony Exmor CMOS Sensor
- 2MP Resolution(AHD/TVI)
- 3.6mm Fixed Lens
- Digital WDR
- Day & Night(IR Cut Filter)
- 3DNR(Digital Noise Reduction)
- Sens-up(~x30)
- Smart IR(24 IR LEDs)

Technical Specifications

Model		HDGI-N31NN(P)F3A32A(T)	
POWER			
Power Source		DC12V±10%	
Power Consumption		Max. 4.5Watts(370mA)	
GENERAL			
Image Sensor		1/2.9" Sony Exmor CMOS	
Total Pixels		2000(H)x1121(V)	
Active Pixels		1920(H)x1080(V)	
Scanning System		Progressive	
Sync. System		Internal	
Video Frame Rate		1920x1080p@25fps ; 1920x1080p@30fps	
CVBS Resolution		1000TVL	
Min. Illumination		1.0Lux(Color), 0Lux(BW, IR LED On)	
Video Output		BNC (AHD/TVI/CVBS Selectable)	
IR	IR LED	24EA IR LED(850nm)	
	Distance	25m	
S/N ratio		More Than 50dB(AGC Off)	
Camera Control		OSD(Joystick switch, Coaxial Communication)	
FUNCTION			
Lens		Manual Auto, 1/60(1/50), FLK~1/50,000sec	
Exposure	Shutter	1~15	
	AGC	Off/Auto(x2, x4, x6, x8, x10, x15, x20, x25, x30)	
	Sens-Up	1~100	
	Brightness	Off/On/Auto	
	DWDR	Off/Auto	
Backlight	Defog	Off/BLC/HSBLC	
		ATW/AWC/Indoor/Outdoor/Manual/AWB	
White Balance		Auto/Color/B&W	
Day & Night		Off/Low/Middle/High	
		Off/Low/Middle/High	
DNR	2DNR	Off/On	
	3DNR	Off/Freeze/Mirror/Neg.Image	
Special	Camera Title	Off/On(4 Zone)	
	D-Effect	Off/On(4 Zone)	
	Motion Detection	Off/On(4 Zone)	
	Privacy Masking	ENG/JPN/CHN1/CHN2/KOR/GER/FRA/ITA/SPA/POL/RUS/POR/NED/TUR/HEB/ARB	
	Language	Live DPC/White DPC/Black DPC	
	Defect Detection	Off/Auto(0~10)	
	Sharpness	CRT/LCD	
	Monitor	Off/On	
	LSC(Shading)	NTSC/PAL	
	Video Mode		
Save & Exit		Save & Exit/No Save/Reset	
CONNECTOR & ETC			
Power Input		DC Jack	
Video Output		BNC Connector	
Transmission Distance		Over 500m Via 5C-2V Coaxial Cable	
Lens Mount		Fixed Mount	
Lens		f=3.6mm F2.0 Fixed Lens, ICR(D&N)	
Operating Temperature		-10~+50℃ (14~122°F)	
Operating Humidity		0~96%(Non-Condensing)	
External Dimension		Ø120x88mm	
Weight		260g	

Specifications are subject to change without notice.



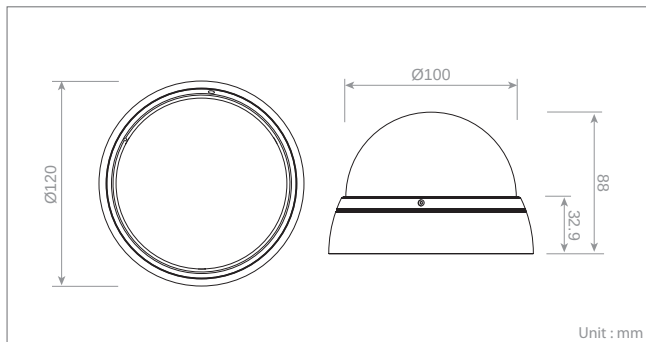
Key Functions

- AHD/TVI/CVBS Selectable
- High Speed, Long Distance Real Time Transmission
- NTSC/PAL Selectable
- Defog
- LSC(Lens Shading Correction)
- HSBLC(Hightlight Suppression BLC)
- Motion Detection
- Privacy Masking
- Coaxial Communication

Optional Accessory

- HDB344(Wall Mount)
- HDA401(Angle Bracket)

Dimension



HDGI-N31NN(P)V2A32A(T)

2MP HD Hybrid IR Plastic Dome Camera

Key Features

- 1/2.9" 2.1M Sony Exmor CMOS Sensor
- 2MP Resolution(AHD/TVI)
- 2.8~12mm Varifocal Lens
- Digital WDR
- Day & Night(IR Cut Filter)
- 3DNR(Digital Noise Reduction)
- Sens-up(~x30)
- Smart IR(24 IR LEDs)

Technical Specifications

Model	HDGI-N31NN(P)V2A32A(T)	
POWER		
Power Source	DC12V±10%	
Power Consumption	Max. 4.5Watts(370mA)	
GENERAL		
Image Sensor	1/2.9" Sony Exmor CMOS	
Total Pixels	2000(H)x1121(V)	
Active Pixels	1920(H)x1080(V)	
Scanning System	Progressive	
Sync. System	Internal	
Video Frame Rate	1920x1080p@25fps ; 1920x1080p@30fps	
CVBS Resolution	1000TVL	
Min. Illumination	1.0Lux(Color), 0Lux(BW, IR LED On)	
Video Output	BNC (AHD/TVI/CVBS Selectable)	
IR	IR LED	24EA IR LED(850nm)
	Distance	25m
S/N ratio	More Than 50dB(AGC Off)	
Camera Control	OSD(Joystick switch, Coaxial Communication)	
FUNCTION		
Lens	DC/ Manual	
Exposure	Shutter	Auto, 1/60(1/50), FLK~1/50,000sec
	AGC	1~15
	Sens-Up	Off/Auto(x2, x4, x6, x8, x10, x15, x20, x25, x30)
	Brightness	1~100
	DWDR	Off/On/Auto
	Defog	Off/Auto
Backlight	Off/BLC/HSBLC	
White Balance	ATW/AWC/Indoor/Outdoor/Manual/AWB	
Day & Night	Auto/Color/B&W	
DNR	2DNR	Off/Low/Middle/High
	3DNR	Off/Low/Middle/High
Special	Camera Title	Off/On
	D-Effect	Off/Freeze/Mirror/Neg.Image
	Motion Detection	Off/On(4 Zone)
	Privacy Masking	Off/On(4 Zone)
	Language	ENG/JPN/CHN1/CHN2/KOR/GER/FRA/ITA/SPA/POL/RUS/POR/NED/TUR/HEB/ARB
	Defect Detection	Live DPC/White DPC/Black DPC
	Sharpness	Off/Auto(0~10)
	Monitor	CRT/LCD
	LSC(Shading)	Off/On
	Video Mode	NTSC/PAL
Save & Exit	Save & Exit/No Save/Reset	
CONNECTOR & ETC		
Power Input	DC Jack	
Video Output	BNC Connector	
Transmission Distance	Over 500m Via 5C-2V Coaxial Cable	
Lens Mount	Fixed Mount	
Lens	f=2.8~12mm F1.2~360 Varifocal, ICR(D&N)	
Operating Temperature	-10~+50℃ (14~122°F)	
Operating Humidity	0~96%(Non-Condensing)	
External Dimension	Ø120x88mm	
Weight	300g	

Specifications are subject to change without notice.



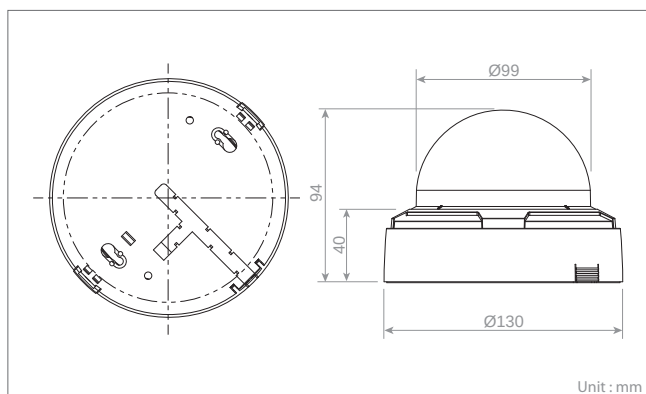
Key Functions

- AHD/TVI/CVBS Selectable
- High Speed, Long Distance Real Time Transmission
- NTSC/PAL Selectable
- Defog
- LSC(Lens Shading Correction)
- HSBLC(Hightlight Suppression BLC)
- Motion Detection
- Privacy Masking
- Coaxial Communication

Optional Accessory

- HDB344(Wall Mount)

Dimension



HDGI-N31NN(P)E1A0A(T)

2MP HD Hybrid IR Plastic Dome Camera

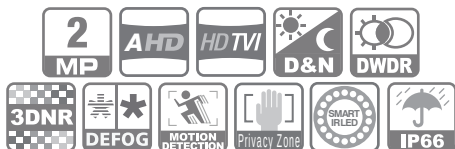
Key Features

- 1/2.9" 2.1M Sony Exmor CMOS Sensor
- 2MP Resolution(AHD/TVI)
- 2.8~12mm Motorized Varifocal Lens
- Digital WDR
- Day & Night(IR Cut Filter)
- 3DNR(Digital Noise Reduction)
- Sens-up(~x30)
- Smart IR(28 IR LEDs)

Technical Specifications

Model		HDGI-N31NN(P)E1A0A(T)	
POWER			
Power Source		DC12V±10%	
Power Consumption		Max. 4.5Watts(370mA)	
GENERAL			
Image Sensor		1/2.9" Sony Exmor CMOS	
Total Pixels		2000(H)x1121(V)	
Active Pixels		1920(H)x1080(V)	
Scanning System		Progressive	
Sync. System		Internal	
Video Frame Rate		1920x1080p@25fps ; 1920x1080p@30fps	
CVBS Resolution		1000TVL	
Min. Illumination		1.0Lux(Color), 0Lux(BW, IR LED On)	
Video Output		BNC (AHD/TVI/CVBS Selectable)	
IR	IR LED	28EA IR LED(850nm)	
	Distance	25m	
S/N ratio		More Than 50dB(AGC Off)	
Camera Control		OSD(Joystick switch, Coaxial Communication)	
FUNCTION			
Lens		DC/ Manual	
Exposure	Shutter	Auto, 1/60(1/50), FLK~1/50,000sec	
	AGC	1~15	
	Sens-Up	Off/Auto(x2, x4, x6, x8, x10, x15, x20, x25, x30)	
	Brightness	1~100	
	DWDR	Off/On/Auto	
	Defog	Off/Auto	
Backlight		Off/BLC/HSBLC	
White Balance		ATW/AWC/Indoor/Outdoor/Manual/AWB	
Day & Night		Auto/Color/B&W	
DNR	2DNR	Off/Low/Middle/High	
	3DNR	Off/Low/Middle/High	
Special	Camera Title	Off/On	
	D-Effect	Off/Freeze/Mirror/Neg.Image	
	Motion Detection	Off/On(4 Zone)	
	Privacy Masking	Off/On(4 Zone)	
	Language	ENG/JPN/CHN1/CHN2/KOR/GER/FRA/ITA/SPA/POL/RUS/POR/NED/TUR/HEB/ARB	
	Defect Detection	Live DPC/White DPC/Black DPC	
	Sharpness	Off/Auto(0~10)	
	Monitor	CRT/LCD	
	LSC(Shading)	Off/On	
	Video Mode	NTSC/PAL	
Save & Exit		Save & Exit/No Save/Reset	
CONNECTOR & ETC			
Power Input		DC Jack	
Video Output		BNC Connector	
Transmission Distance		Over 500m Via 5C-2V Coaxial Cable	
Lens Mount		Fixed Mount	
Lens		f=2.8~12mm F1.2~360 Motorized Varifocal, ICR(D&N)	
Operating Temperature		-10~+50℃ (14~122°F)	
Operating Humidity		0~96%(Non-Condensing)	
External Dimension		Ø130x94mm	
Weight		Approx. 300g	

Specifications are subject to change without notice.



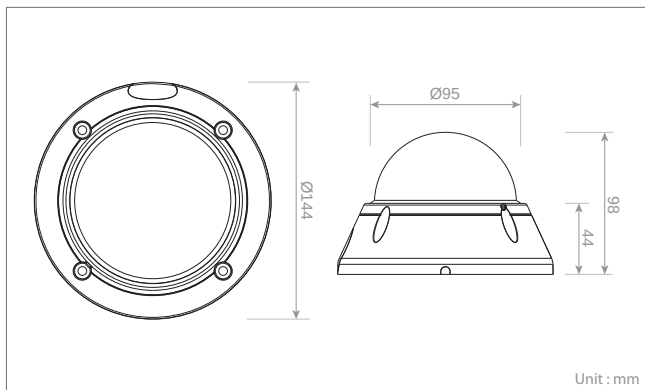
Key Functions

- AHD/TVI/CVBS Selectable
- High Speed, Long Distance Real Time Transmission
- NTSC/PAL Selectable
- Defog
- LSC(Lens Shading Correction)
- HSBLC(Hightlight Suppression BLC)
- Motion Detection
- Privacy Masking
- Coaxial Communication

Optional Accessory

- HDB243(Wall Mount)
- HVPWB2(Wall Mount)
- HVPCB2(Ceiling Mount)
- HDA401(Angle Bracket)
- HDA501(Junction Box)

Dimension



HDGI-N31NN(P)F3S22A(T)

2MP HD Hybrid IR VP Dome Camera

Key Features

- 1/2.9" 2.1M Sony Exmor CMOS Sensor
- 2MP Resolution(AHD/TVI)
- 3.6mm Fixed Lens
- Digital WDR
- Day & Night(IR Cut Filter)
- 3DNR(Digital Noise Reduction)
- Sens-up(~x30)
- Smart IR(24 IR LEDs)
- IP66, Vandal Proof

Technical Specifications

Model		HDGI-N31NN(P)F3S22A(T)	
POWER			
Power Source		DC12V±10%	
Power Consumption		Max. 4.3Watts(360mA)	
GENERAL			
Image Sensor		1/2.9" Sony Exmor CMOS	
Total Pixels		2000(H)x1121(V)	
Active Pixels		1920(H)x1080(V)	
Scanning System		Progressive	
Sync. System		Internal	
Video Frame Rate		1920x1080p@25fps ; 1920x1080p@30fps	
CVBS Resolution		1000TVL	
Min. Illumination		1.0Lux(Color), 0Lux(BW, IR LED On)	
Video Output		BNC (AHD/TVI/CVBS Selectable)	
IR	IR LED	24EA IR LED(850nm)	
	Distance	25m	
S/N ratio		More Than 50dB(AGC Off)	
Camera Control		OSD(Joystick switch, Coaxial Communication)	
FUNCTION			
Lens		Manual	
Exposure	Shutter	Auto, 1/60(1/50), FLK~1/50,000sec	
	AGC	1~15	
	Sens-Up	Off/Auto(x2, x4, x6, x8, x10, x15, x20, x25, x30)	
	Brightness	1~100	
	DWDR	Off/On/Auto	
Backlight	Defog	Off/Auto	
		Off/BLC/HSBLC	
		ATW/AWC/Indoor/Outdoor/Manual/AWB	
White Balance			
Day & Night		Auto/Color/B&W	
DNR	2DNR	Off/Low/Middle/High	
	3DNR	Off/Low/Middle/High	
Special	Camera Title	Off/On	
	D-Effect	Off/Freeze/Mirror/Neg.Image	
	Motion Detection	Off/On(4 Zone)	
	Privacy Masking	Off/On(4 Zone)	
	Language	ENG/JPN/CHN1/CHN2/KOR/GER/FRA/ITA/SPA/POL/RUS/POR/NED/TUR/HEB/ARB	
	Defect Detection	Live DPC/White DPC/Black DPC	
	Sharpness	Off/Auto(0~10)	
	Monitor	CRT/LCD	
	LSC(Shading)	Off/On	
	Video Mode	NTSC/PAL	
Save & Exit		Save & Exit/No Save/Reset	
CONNECTOR & ETC			
Power Input		DC Jack	
Video Output		BNC Connector	
Transmission Distance		Over 500m Via 5C-2V Coaxial Cable	
Lens Mount		Fixed Mount	
Lens		f=3.6mm F2.0 Fixed Lens, ICR(D&N)	
Operating Temperature		-20~+50℃ (-4~122°F)	
Operating Humidity		0~96%(Non-Condensing)	
External Dimension		Ø144x98mm	
Weight		530g	
Ingress Protection		IP66	

Specifications are subject to change without notice.



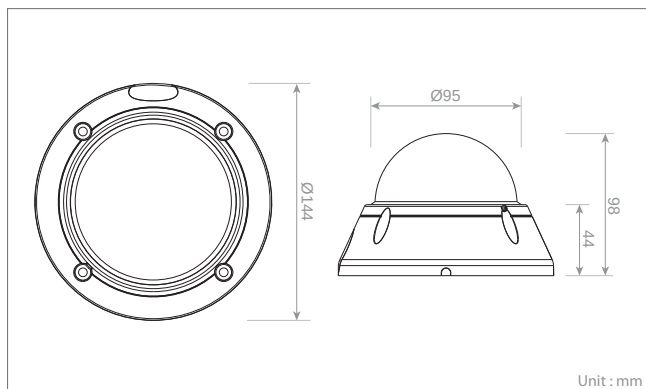
Key Functions

- AHD/TVI/CVBS Selectable
- High Speed, Long Distance Real Time Transmission
- NTSC/PAL Selectable
- Defog
- LSC(Lens Shading Correction)
- HSBLC(Hightlight Suppression BLC)
- Motion Detection
- Privacy Masking
- Coaxial Communication

Optional Accessory

- HDB243(Wall Mount)
- HVPWB2(Wall Mount)
- HVPCB2(Ceiling Mount)
- HDA401(Angle Bracket)
- HDA501(Junction Box)

Dimension



HDGI-N31NN(P)V2S22A(T)

2MP HD Hybrid IR VP Dome Camera

Key Features

- 1/2.9" 2.1M Sony Exmor CMOS Sensor
- 2MP Resolution(AHD/TVI)
- 2.8~12mm Varifocal Lens
- Digital WDR
- Day & Night(IR Cut Filter)
- 3DNR(Digital Noise Reduction)
- Sens-up(~x30)
- Smart IR(24 IR LEDs)
- IP66, Vandal Proof

Technical Specifications

Model		HDGI-N31NN(P)V2S22A(T)	
POWER			
Power Source		DC12V±10%	
Power Consumption		Max. 4.3Watts(360mA)	
GENERAL			
Image Sensor		1/2.9" Sony Exmor CMOS	
Total Pixels		2000(H)x1121(V)	
Active Pixels		1920(H)x1080(V)	
Scanning System		Progressive	
Sync. System		Internal	
Video Frame Rate		1920x1080p@25fps ; 1920x1080p@30fps	
CVBS Resolution		1000TVL	
Min. Illumination		1.0Lux(Color), 0Lux(BW, IR LED On)	
Video Output		BNC (AHD/TVI/CVBS Selectable)	
IR	IR LED	24EA IR LED(850nm)	
	Distance	25m	
S/N ratio		More Than 50dB(AGC Off)	
Camera Control		OSD(Joystick switch, Coaxial Communication)	
FUNCTION			
Lens		DC/ Manual Auto, 1/60(1/50), FLK~1/50,000sec	
Exposure	Shutter	1~15	
	AGC	Off/Auto(x2, x4, x6, x8, x10, x15, x20, x25, x30)	
	Sens-Up	1~100	
	Brightness	Off/On/Auto	
	DWDR	Off/Auto	
	Defog	Off/BLC/HSBLC	
Backlight		ATW/AWC/Indoor/Outdoor/Manual/AWB	
White Balance		Auto/Color/B&W	
Day & Night		Off/Low/Middle/High	
DNR	2DNR	Off/Low/Middle/High	
	3DNR	Off/Low/Middle/High	
Special	Camera Title	Off/On	
	D-Effect	Off/Freeze/Mirror/Neg.Image	
	Motion Detection	Off/On(4 Zone)	
	Privacy Masking	Off/On(4 Zone)	
	Language	ENG/JPN/CHN1/CHN2/KOR/GER/FRA/ITA/SPA/POL/RUS/POR/NED/TUR/HEB/ARB	
	Defect Detection	Live DPC/White DPC/Black DPC	
	Sharpness	Off/Auto(0~10)	
	Monitor	CRT/LCD	
	LSC(Shading)	Off/On	
	Video Mode	NTSC/PAL	
Save & Exit		Save & Exit/No Save/Reset	
CONNECTOR & ETC			
Power Input		DC Jack	
Video Output		BNC Connector	
Transmission Distance		Over 500m Via 5C-2V Coaxial Cable	
Lens Mount		Fixed Mount	
Lens		f=2.8~12mm F1.2~360 Varifocal, ICR(D&N)	
Operating Temperature		-20~+50 ℃ (-4~122°F)	
Operating Humidity		0~96%(Non-Condensing)	
External Dimension		Ø144x98mm	
Weight		530g	
Ingress Protection		IP66	

Specifications are subject to change without notice.



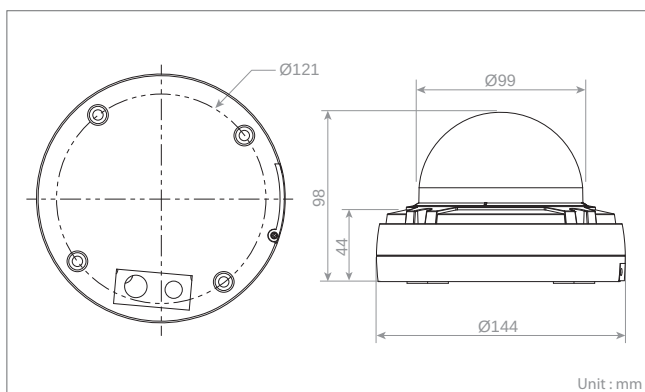
Key Functions

- AHD/TVI/CVBS Selectable
- High Speed, Long Distance Real Time Transmission
- NTSC/PAL Selectable
- Defog
- LSC(Lens Shading Correction)
- HSBLC(Hightlight Suppression BLC)
- Motion Detection
- Privacy Masking
- Coaxial Communication

Optional Accessory

- HDB243(Wall Mount)
- HVPWB2(Wall/Ceiling Mount)
- HVPCB2(Ceiling Mount)
- HDA501(Junction Box)

Dimension



HDGI-N31NN(P)E1S0A(T)

2MP HD Hybrid IR VP Dome Camera

Key Features

- 1/2.9" 2.1M Sony Exmor CMOS Sensor
- 2MP Resolution(AHD/TVI)
- 2.8~12mm Motorized Varifocal Lens
- Digital WDR
- Day & Night(IR Cut Filter)
- 3DNR(Digital Noise Reduction)
- Sens-up(~x30)
- Smart IR(28 IR LEDs)
- IP66 Vandal Proof

Technical Specifications

Model		HDGI-N31NN(P)E1S0A(T)	
POWER			
Power Source		DC12V±10%	
Power Consumption		Max. 4.5Watts(370mA)	
GENERAL			
Image Sensor		1/2.9" Sony Exmor CMOS	
Total Pixels		2000(H)x1121(V)	
Active Pixels		1920(H)x1080(V)	
Scanning System		Progressive	
Sync. System		Internal	
Video Frame Rate		1920x1080p@25fps ; 1920x1080p@30fps	
CVBS Resolution		1000TVL	
Min. Illumination		1.0Lux(Color), 0Lux(BW, IR LED On)	
Video Output		BNC (AHD/TVI/CVBS Selectable)	
IR	IR LED	28EA IR LED(850nm)	
	Distance	25m	
S/N ratio		More Than 50dB(AGC Off)	
Camera Control		OSD(Joystick switch, Coaxial Communication)	
FUNCTION			
Lens		DC/ Manual	
Exposure	Shutter	Auto, 1/60(1/50), FLK~1/50,000sec	
	AGC	1~15	
	Sens-Up	Off/Auto(x2, x4, x6, x8, x10, x15, x20, x25, x30)	
	Brightness	1~100	
	DWDR	Off/On/Auto	
Backlight	Defog	Off/Auto	
		Off/BLC/HSBLC	
White Balance		ATW/AWC/Indoor/Outdoor/Manual/AWB	
Day & Night		Auto/Color/B&W	
DNR	2DNR	Off/Low/Middle/High	
	3DNR	Off/Low/Middle/High	
Special	Camera Title	Off/On	
	D-Effect	Off/Freeze/Mirror/Neg.Image	
	Motion Detection	Off/On(4 Zone)	
	Privacy Masking	Off/On(4 Zone)	
	Language	ENG/JPN/CHN1/CHN2/KOR/GER/FRA/ITA/SPA/POL/RUS/POR/NED/TUR/HEB/ARB	
	Defect Detection	Live DPC/White DPC/Black DPC	
	Sharpness	Off/Auto(0~10)	
	Monitor	CRT/LCD	
	LSC(Shading)	Off/On	
	Video Mode	NTSC/PAL	
Save & Exit		Save & Exit/No Save/Reset	
CONNECTOR & ETC			
Power Input		DC Jack	
Video Output		BNC Connector	
Transmission Distance		Over 500m Via 5C-2V Coaxial Cable	
Lens Mount		Fixed Mount	
Lens		f=2.8~12mm F1.2~360 Motorized Varifocal, ICR(D&N)	
Operating Temperature		-20~+50℃ (-4~122°F)	
Operating Humidity		0~96%(Non-Condensing)	
External Dimension		Ø144x98mm	
Weight		Approx. 810g	
Ingress Protection		IP66	

Specifications are subject to change without notice.



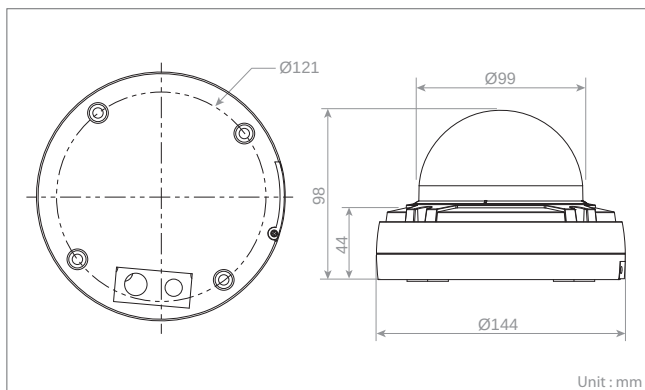
Key Functions

- AHD/TVI/CVBS Selectable
- High Speed, Long Distance Real Time Transmission
- NTSC/PAL Selectable
- Defog
- LSC(Lens Shading Correction)
- HSBLC(Hightlight Suppression BLC)
- Motion Detection
- Privacy Masking
- Coaxial Communication

Optional Accessory

- HDB243(Wall Mount)
- HVPWB2(Wall/Ceiling Mount)
- HVPCB2(Ceiling Mount)
- HDA501(Junction Box)

Dimension



HDGI-N35NN(P)E1S0A(T)

2MP HD Hybrid IR VP Dome Camera

Key Features

- 1/2.8" Sony STARVIS CMOS Sensor
- 2MP Resolution(AHD/TVI)
- 2.8~12mm Motorized Varifocal Lens
- Digital WDR
- Day & Night(IR Cut Filter)
- 3DNR(Digital Noise Reduction)
- Sens-up(~x32)
- Smart IR(28 IR LEDs)
- IP66 Vandal Proof

Technical Specifications

Model	HDGI-E35NN(P)E1S0A(T)	
POWER		
Power Source	AC24V/DC12V±10%	
Power Consumption	Max. 7.5Watts(630mA)	
GENERAL		
Image Sensor	1/2.8" Sony STARVIS CMOS	
Total Pixels	1945(H)x1109(V)	
Active Pixels	1,920(H)x1,080(V)	
Scanning System	Progressive	
Sync. System	Internal	
Video Frame Rate	1920x1080p@25fps ; 1920x1080p@30fps	
CVBS Resolution	1000TVL	
Min. Illumination	0.03Lux(Color), 0Lux(BW, IR LED On)	
Video Output	BNC1(AHD/TVI/CVI) BNC2(TVI/CVBS)	
IR	IR LED	28EA IR LED(850nm)
	Distance	25M
S/N ratio	More Than 52dB(AGC Off)	
Camera Control	OSD(Joystick switch, Coaxial Communication)	
FUNCTION		
Lens	ALC / ELC	
Exposure	Shutter	Auto, FLK, Manual(1/30(25)~1/30,000)
	AGC	0~10
	Sens-Up	Off/x2, x4, x8, x16, x32
	Brightness	1~20
	DWDR	Off/Low/Middle/High
Backlight	Defog	Off/On
		Off/BLC/HSBLC/WDR
White Balance	Auto/AUTOext/Preset/Manual	
Day & Night	Auto/Color/B&W/Ext	
DNR	Off/Low/Middle/High	
Image	Color Gain	0~20
	Sharpness	0~10
	Gamma	0.45/0.55/0.65/0.75
	Mirror	Off/On
	Flip	Off/On
	Privacy Masking	Off/On(16 Zone)
	Motion	Off/On
Frame Rate	1080 30p / 720 30p / 1080 25p / 720 25p	
Frequency	50Hz / 60Hz	
Save & Exit	Exit(Auto Save)	
CONNECTOR & ETC		
Power Input	Terminal Block	
Video Output	2 BNC Connector	
Transmission Distance	Over 500m Via 5C-2V Coaxial Cable	
Lens Mount	Fixed Mount	
Lens	f=2.8~12mm F1.2~360 Motorized Varifocal, ICR(D&N)	
Operating Temperature	-20~+50 °C (-4~122°F)	
Operating Humidity	0~96%(Non-Condensing)	
External Dimension	Ø144x98mm	
Weight	Approx. 810g	
Ingress Protection	IP66	

Specifications are subject to change without notice.



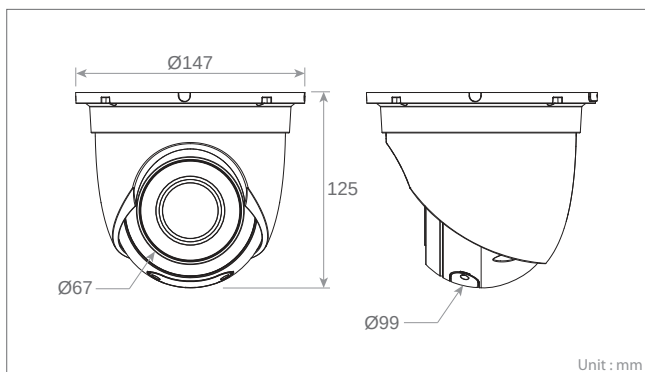
Key Functions

- TVI, AHD, CVBS Selectable
- Long Distance Real Time Transmission
- NTSC/PAL Selectable
- Defog
- HSBLC(Highlight Suppression BLC)
- UTC Control
- Privacy Masking

Optional Accessory

- HDB243X(Wall Mount)
- HDA501(Junction Box)

Dimension



TXN-320H1

2MP HD Hybrid Motorized PT Camera

Key Features

- Hybrid HD Analog Camera : HD-TVI, AHD or CVBS
- Motorized Pan/Tilt Control
- Motorized Varifocal 2.8~12mm Lens
- Day & Night
- WDR(ATR-EX)
- Smart IR(28 IR LEDs)

Technical Specifications

Model	TXN-320H1	
IMAGE		
Lens	Motorized Varifocal 2.8~12mm, F1.4, DC Iris	
Angle of View	100~35°(H)	
Image Sensor	Type	1/2.9" SONY Exmor CMOS Sensor
	Pixels	1984(H)x1105(V)
Min. Illumination	Color : 0.1Lux@F1.4 / BW : 0Lux(IR LED On)	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	Yes	
Day and Night Mode	True D/N(Auto, Day, Night)	
Noise Reduction	2DNR, 3DNR	
Digital Zoom	-	
Exposure Control	Auto, Manual	
White Balance Control	AWB, ATW, AWC, Indoor, Outdoor, Manual	
Back Light Compensation	BLC, HSBLC	
Image Effect	Off, Freeze, Mirror, Negative Image	
Shutter Speed	1/50,000~x30 second	
Pan/Tilt Range	Pan : 357° / Tilt : 100°	
IR Illuminator	Quantity	28 IR LEDs
	Angle	76°(H)
	Distance	25m
VIDEO		
Resolution	AHD or HD-TVI : 1080p@25/30fps CVBS : 1000TVL	
Video Output	Selectable : AHD or HD-TVI or CVBS	
Defog	Yes	
Motion Detection Area	4	
Privacy Area	4	
Defect Detection	Live DPC, White DPC, Black DPC	
Auto Focus	Mode(Semi, Auto, Manual), One Shot AF, TDN AF	
EXTERNAL IN/OUT		
Power Input	DC Jack	
Video Output	BNC Jack	
Control	UTC Control	
ETC		
Operating Humidity	0~90%RH(Non-Condensing)	
Operating Temperature	-20~+50 °C	
Power Supply	12VDC	
Power Consumption	600mA(7.2W)	
Dimension	147(Ø)x125(H)mm	
Net Weight	Approx. 900g	
Ingress Protection	IP66	

Specifications are subject to change without notice.

HD ANALOG SPEED DOME CAMERA

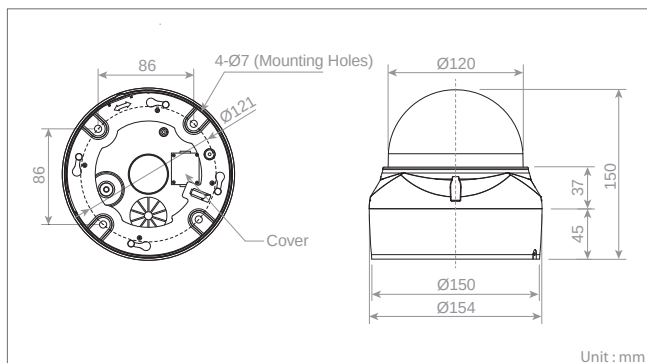
Model	Type	Image	Key SPEC							
			Sensor	Resolution	Lens	Min. Illumination	AE	IR (Distance)	Ingress Protection	Page
TMT-22032D3	2M PTZ		1/2.8" CMOS	1920x1080	4.7~94mm AF	0.013Lux	TWDR	-	IP66	p.81
TMT-22032D3A	2M PTZ		1/2.8" CMOS	1920x1080	4.7~94mm AF	0.013Lux	TWDR	-	IP66	p.82
TFT-22033D1	2M PTZ		1/2.8" CMOS	1920x1080	43~129mm AF	0.013Lux	TWDR	-	-	p.83
TFT-22033D1A	2M PTZ		1/2.8" CMOS	1920x1080	4.3~129mm AF	0.013Lux	TWDR	-	IP66	p.84
TFT-22053D1H	2M PTZ		1/2.8" CMOS	1920x1080	4.3~129mm AF	0.013Lux	TWDR	2EA (200m)	IP66	p.85



Optional Accessory

- HDB243(Wall Bracket)
- HVPCB2(Ceiling Bracket)
- HVPWB2(Wall Bracket)
- HDA301(Conduit Adapter)

Dimension



TMT-22032D3(H)

20X 2MP HD Hybrid Mini Speed Dome Camera

Key Features

- Hybrid HD Analog Camera : AHD or HD-TVI
- 2MP Resolution(AHD)
- Optical Zoom 20X
- Digital Zoom 16X
- True WDR, True Day & Night
- Max. 380°/sec Speed(Preset)
- Preset(240), Tour(8), Pattern(8), Privacy(16)
- Alarm Input(4), Alarm Output(2)
- 12VDC, 24VAC
- IP66

Technical Specifications

Model	TMT-22032D3		TMT-22032D3H
IMAGE			
Lens	Optical Zoom 20X, 4.7~94mm		
Angle of View	55.5~3°(H)		
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor	
	Pixels	1945(H)x1097(V)	
Min. Illumination	Color : 0.35Lux / BW : 0.013Lux, 50IRE		
Scanning Mode	Progressive Scan		
Wide Dynamic Range	True WDR		
Day and Night Mode	True Day & Night		
Noise Reduction	3DNR		
Digital Zoom	16X		
Exposure Control	Auto, Manual, Shutter Priority, Iris Priority		
White Balance Control	Auto, Fluorescent, Incandescent, Outdoor, Manual		
Back Light Compensation	Yes		
Image Effect	Flip(Digital)		
Shutter Speed	25/30fps : Auto(1/30,000~x8sec), Manual 50/60fps : Auto(1/50,000~x8sec), Manual		
DIS	Yes		
Defog	Yes		
VIDEO			
Resolution	HD-TVI : 1080p@25/30fps, 720p@25/30/50/60fps AHD : 1080p@25/30fps		
Video Output	HD-TVI or AHD, Composite		
PTZ FUNCTION			
Pan Range	360°Endless		
Pan Speed	Max. 380°/sec.(Preset)		
Tilt Range	-10~190°		
Tilt Speed	Max. 380°/sec.(Preset)		
Auto Calibration	0.1~6"		
Preset	240		
Tour	8		
Pattern	8		
Home Function	Yes		
Privacy Mask Zone	16 Programmable Zones		
EXTERNAL IN/OUT			
Video HD Output	BNC Jack		
Video Composite Output	BNC Jack		
Alarm	4 Input, 2 Output		
Control	RS-485, Baud Rate : 2,400~38,400bps(Default : 9,600bps)		
ID(Camera Address)	1~3999		
ETC			
Operating Humidity	0~90% RH(Non-Condensing)		
Operating Temperature	-10~+50 °C	-30~+50 °C	
Power Supply	12VDC, 24VAC	24VAC	
Power Consumption	1A(12W)@12VDC, 24VAC	1.5A(22W)@24VAC	
Dimension	154(Ø)x150(H)mm		
Net Weight	Approx. 1.6kg		
Ingress Protection	IP66		

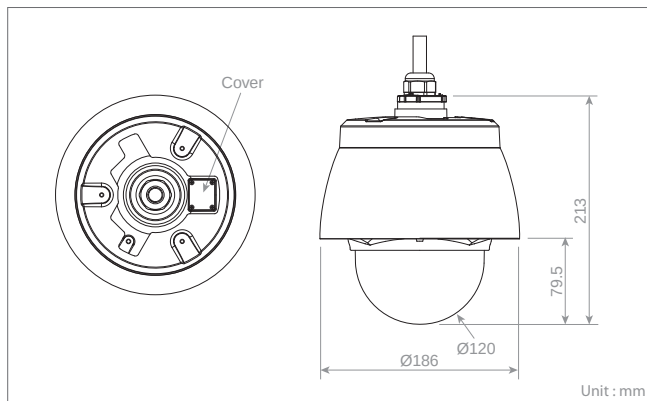
Specifications are subject to change without notice.



Optional Accessory

- HDB241(Ceiling Bracket)
- HDB242E(Wall Bracket)

Dimension



TMT-22032D3A

20X 2MP HD Hybrid Mini Speed Dome Camera

Key Features

- Hybrid HD Analog Camera : AHD or HD-TVI
- 2MP Resolution(AHD, TVI)
- Optical Zoom 20X
- Digital Zoom 16X
- True WDR, True Day & Night
- Max. 380°/sec Speed(Preset)
- Preset(240), Tour(8), Pattern(8), Privacy(16)
- Alarm Input(4), Alarm Output(2)
- 12VDC, 24VAC
- IP66 with Sunshield

Technical Specifications

Model		TMT-22032D3A	
IMAGE			
Lens		Optical Zoom 20X, 4.7~94mm	
Angle of View		55.5~3°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor	
	Pixels	1945(H)x1097(V)	
Min. Illumination		Color : 0.35Lux / BW : 0.013Lux, 50IRE	
Scanning Mode		Progressive Scan	
Wide Dynamic Range		True WDR	
Day and Night Mode		True Day & Night	
Noise Reduction		3DNR	
Digital Zoom		16X	
Exposure Control		Auto, Manual, Shutter Priority, Iris Priority	
White Balance Control		Auto, Fluorescent, Incandescent, Outdoor, Manual	
Back Light Compensation		Yes	
Image Effect		Flip(Digital)	
Shutter Speed		25/30fps : Auto(1/30,000~x8sec), Manual 50/60fps : Auto(1/50,000~x8sec), Manual	
DIS		Yes	
Defog		Yes	
VIDEO			
Resolution		HD-TVI : 1080p@25/30fps, 720p@25/30/50/60fps AHD : 1080p@25/30fps	
Video Output		HD-TVI or AHD, Composite	
PTZ FUNCTION			
Pan Range		360° Endless	
Pan Speed		Max. 380°/sec.(Preset)	
Tilt Range		-10~190°	
Tilt Speed		Max. 380°/sec.(Preset)	
Auto Calibration		0.1~6"	
Preset		240	
Tour		8	
Pattern		8	
Home Function		Yes	
Privacy Mask Zone		16 Programmable Zones	
EXTERNAL IN/OUT			
Video HD Output		BNC Jack	
Video Composite Output		BNC Jack	
Alarm		4 Input, 2 Output	
Control		RS-485, Baud Rate : 2,400~38,400bps(Default : 9,600bps)	
ID(Camera Address)		1~3999	
ETC			
Operating Humidity		0~90% RH(Non-Condensing)	
Operating Temperature		-10~+50 °C	
Power Supply		Camera : 12VDC, 24VAC Heater & Fan : 24VAC	
Power Consumption		Camera : 1A(12W)@12VDC, 24VAC Heater & Fan : 2.7A(45W)@24VAC	
Dimension		186(Ø)x213(H)mm	
Net Weight		2.3kg	
Ingress Protection		IP66	

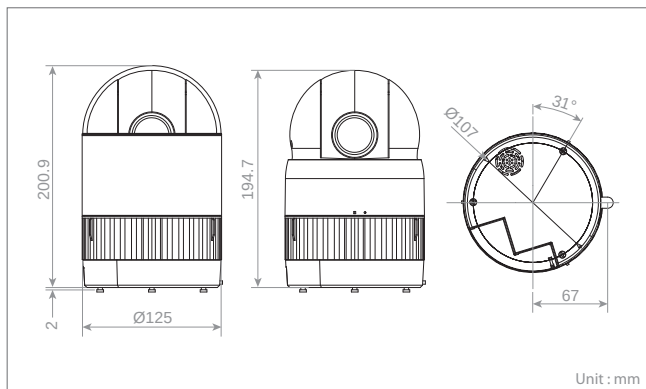
Specifications are subject to change without notice.



Optional Accessory

- HCH304 Series(Outdoor Housing)
- HDB241(Housing Ceiling Bracket)
- HDB242(Housing Wall Bracket)
- HCS251 Series(Recess Mount Kit)

Dimension



TFT-22033D1

30X 2MP HD Hybrid Speed Dome Camera

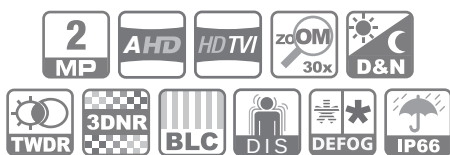
Key Features

- Hybrid HD Analog Camera : AHD or HD-TVI
- 2MP Resolution(AHD, TVI)
- Optical Zoom 30X, Digital Zoom 16X
- True WDR, True Day & Night
- Max. 380°/sec Speed(Preset)
- Preset(240), Tour(8), Pattern(8), Privacy(16)
- Alarm Input(4), Alarm Output(2)
- 12VDC, 24VAC

Technical Specifications

Model	TFT-22033D1	
IMAGE		
Lens	Optical Zoom 30X, 4.3~129mm	
Angle of View	61.8~2.9°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor
	Pixels	1945(H)x1097(V)
Min. Illumination	Color : 0.35Lux / BW : 0.013Lux@50IRE	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	True WDR	
Day and Night Mode	True Day & Night	
Noise Reduction	3DNR	
Digital Zoom	16X	
Exposure Control	Auto, Manual, Shutter Priority, Iris Priority	
White Balance Control	Auto, Fluorescent, Incandescent, Outdoor, Manual	
Back Light Compensation	Yes	
Image Effect	Flip	
Shutter Speed	25/30fps : Auto(1/30,000~x8 sec.), Manual	
	50/60fps : Auto(1/50,000~x8 sec.), Manual	
DIS	Yes	
Defog	Yes	
VIDEO		
Resolution	HD-TVI : 1080p@25/30fps, 720p@25/30/50/60fps AHD : 1080p@25/30fps	
Video Output	HD-TVI or AHD, Composite	
PTZ FUNCTION		
Pan Range	360° Endless	
Pan Speed	Max. 380°/sec.(Preset)	
Tilt Range	-10~190°	
Tilt Speed	Max. 380°/sec.(Preset)	
Auto Calibration	0.1~6"	
Preset	240	
Tour	8	
Pattern	8	
Home Function	Yes	
Privacy Mask Zone	16 Programmable Zones	
EXTERNAL IN/OUT		
Video HD Output	BNC Jack	
Video Composite Output	BNC Jack	
Alarm	4 Input, 2 Output	
Control	RS-485, Baud Rate : 2,400~38,400bps(Default : 9,600bps)	
ID(Camera Adress)	1~3999	
ETC		
Operating Humidity	0~90% RH(Non-Condensing)	
Operating Temperature	0~+50℃	
Power Supply	12VDC, 24VAC	
Power Consumption	1A(12W)@12VDC, 24VAC	
Dimension	125(Ø)x200.9(H)mm	
Net Weight	Approx. 1.2kg	

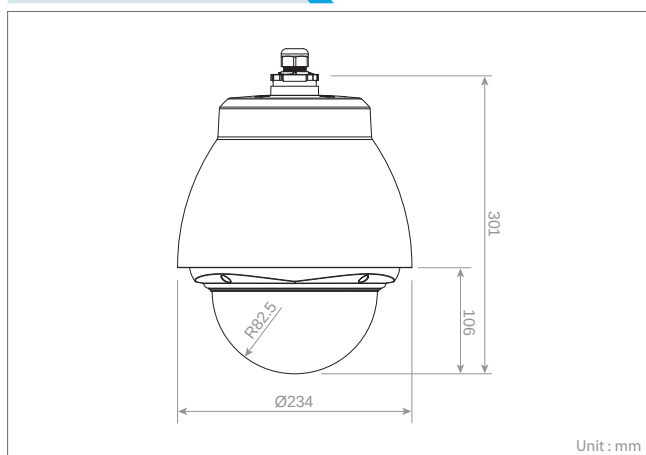
Specifications are subject to change without notice.



Optional Accessory

- HDB241(Ceiling Bracket)
- HCM201(Roof & Parapet Mount)
- HDB242E(Wall Bracket)

Dimension



Unit : mm

TFT-22033D1A

30X 2MP HD Hybrid Speed Dome Camera

Key Features

- Hybrid HD Analog Camera : AHD or HD-TVI
- 2MP Resolution(AHD, TVI)
- Optical Zoom 30X, Digital Zoom 16X
- True WDR, True Day & Night
- Max. 380°/sec Speed(Preset)
- Preset(240), Tour(8), Pattern(8), Privacy(16)
- Alarm Input(4), Alarm Output(2)
- 12VDC, 24VAC
- IP66

Technical Specifications

Model	TFT-22033D1A	
IMAGE		
Lens	Optical Zoom 30X, 4.3~129mm	
Angle of View	61.8~2.9°(H)	
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor
	Pixels	1945(H)x1097(V)
Min. Illumination	Color : 0.35Lux / BW : 0.013Lux@50IRE	
Scanning Mode	Progressive Scan	
Wide Dynamic Range	True WDR	
Day and Night Mode	True Day & Night	
Noise Reduction	3DNR	
Digital Zoom	16X	
Exposure Control	Auto, Manual, Shutter Priority, Iris Priority	
White Balance Control	Auto, Fluorescent, Incandescent, Outdoor, Manual	
Back Light Compensation	Yes	
Image Effect	Flip	
Shutter Speed	25/30fps : Auto(1/30,000~x8 sec.), Manual 50/60fps : Auto(1/50,000~x8 sec.), Manual	
DIS	Yes	
Defog	Yes	
VIDEO		
Resolution	HD-TVI : 1080p@25/30fps, 720p@25/30/50/60fps AHD : 1080p@25/30fps	
Video Output	HD-TVI or AHD, Composite	
PTZ FUNCTION		
Pan Range	360°Endless	
Pan Speed	Max. 380°/sec.(Preset)	
Tilt Range	-10~190°	
Tilt Speed	Max. 380°/sec.(Preset)	
Auto Calibration	0.1~6°	
Preset	240	
Tour	8	
Pattern	8	
Home Function	Yes	
Privacy Mask Zone	16 Programmable Zones	
EXTERNAL IN/OUT		
Video HD-TVI or AHD Output	BNC Jack	
Video Composite Output	BNC Jack	
Alarm	4 Input, 2 Output	
Control	RS-485, Baud Rate : 2,400~38,400bps(Default : 9,600bps)	
ID(Camera Address)	1~3999	
ETC		
Operating Humidity	0~90% RH(Non-Condensing)	
Operating Temperature	-50~+65 °C	
Power Supply	Camera : 12VDC, 24VAC Heater & Fan : 24VAC	
Power Consumption	Camera : 1A(12W)@12VDC, 24VAC Heater & Fan : 2.2A(50W)@24VAC	
Dimension	234(Ø)x301(H)mm	
Net Weight	Approx. 3.3kg	
Ingress Protection	IP66	

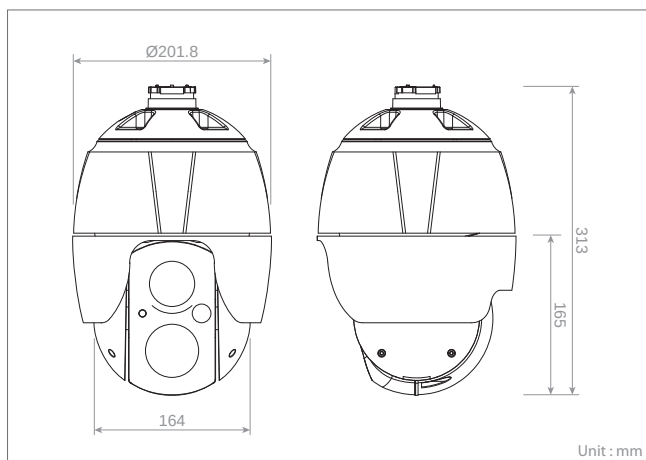
Specifications are subject to change without notice.



Optional Accessory

- HDB241(Ceiling Bracket)
- HDB242E(Wall Bracket)

Dimension



TFT-22053D1H

30X 2MP HD Hybrid IR Speed Dome Camera

Key Features

- HD Analog Camera : AHD or HD-TVI
- 2MP Resolution(AHD, TVI)
- Optical Zoom 30X, Digital Zoom 16X
- Long Range IR LED with Synchronization(up to 200m)
- True WDR, True Day & Night
- Max. 380°/sec Speed(Preset)
- Preset(240), Tour(8), Pattern(8), Privacy(16)
- Alarm Input(4), Alarm Output(2)
- 24VDC, 24VAC
- IP66

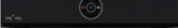
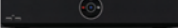
Technical Specifications

Model		TFT-22053D1H
IMAGE		
Lens		Optical Zoom 30X, 4.3~129mm
Angle of View		61.8~2.9°(H)
Image Sensor	Type	1/2.8" SONY STARVIS CMOS Sensor
	Pixels	1945(H)x1097(V)
Min. Illumination		Color : 0.35Lux / BW : 0Lux(IR LED On)
Scanning Mode		Progressive Scan
Wide Dynamic Range		True WDR
Day and Night Mode		True Day & Night
Noise Reduction		3DNR
Digital Zoom		16X
Exposure Control		Auto, Manual, Shutter Priority, Iris Priority
White Balance Control		Auto, Fluorescent, Incandescent, Outdoor, Manual
Back Light Compensation		Yes
Image Effect		Flip
Shutter Speed		25/30fps : Auto(1/30,000~x8 sec.), Manual 50/60fps : Auto(1/50,000~x8 sec.), Manual
DIS		Yes
Defog		Yes
IR Illuminator	Quantity	Synchronized IR LED, Fixed IR LED
	Angle	5~60°
	Distance	Up to 200m
VIDEO		
Resolution		HD-TVI : 1080p@25/30fps, 720p@25/30/50/60fps AHD : 1080p@25/30fps
Video Output		HD-TVI or AHD, Composite
PTZ FUNCTION		
Pan Range		360°Endless
Pan Speed		Max. 380°/sec.(Preset)
Tilt Range		-10~90°
Tilt Speed		Max. 380°/sec.(Preset)
Preset		240
Tour		8
Pattern		8
Home Function		Yes
Privacy Mask Zone		16 Programmable Zones
EXTERNAL IN/OUT		
Video HD Output		BNC Jack
Video Composite Output		BNC Jack
Alarm		4 Input, 2 Output
Control		RS-485, Baud Rate : 2,400~38,400bps(Default : 9,600bps)
ID(Camera Address)		1~3999
ETC		
Operating Humidity		0~90% RH(Non-Condensing)
Operating Temperature		-30~+65 °C
Power Supply		24VDC, 24VAC
Power Consumption		1.6A(38W)@24VDC, 2.6A(38W)@24VAC
Dimension		201.8(Ø)x313(H)mm
Net Weight		Approx. 4.9kg
Ingress Protection		IP66

Specifications are subject to change without notice.

RECORDER

NVR

Model	Type	Image	Key SPEC							
			OS	CH	Resolution	Codec	PoE	Max. HDD	ETC	Page
HNR-4530	4CH NVR		Linux	4CH	Up to 5M	H.264	4 Ports	1 HDD	e-SATA/iSCSI ONVIF 3rd Party	p.86
HNR-8540	8CH NVR		Linux	8CH	Up to 5M	H.264	8 Ports	2 HDD	e-SATA/iSCSI ONVIF 3rd Party	p.87
HNR-16560	16CH NVR		Linux	16CH	Up to 5M	H.264	16 Ports	2 HDD	e-SATA/iSCSI ONVIF 3rd Party	p.87
HNR-16620	16CH NVR		Linux	16CH	Up to 4K	H.265 H.264	16 Ports	4 HDD	e-SATA/iSCSI ONVIF 3rd Party	p.88
HNR-32620	32CH NVR		Linux	32CH	Up to 4K	H.265 H.264	16 Ports	4 HDD	e-SATA/iSCSI ONVIF 3rd Party	p.88
HNR-32600	32CH NVR		Linux	32CH	Up to 4K	H.265 H.264	-	4 HDD	iSCSI ONVIF 3rd Party	p.89
HNR-32600S	32CH NVR		Linux	32CH	Up to 4K	H.265 H.264	-	8 HDD	iSCSI ONVIF 3rd Party	p.90
HNR-64600S	64CH NVR		Linux	64CH	Up to 4K	H.265 H.264	-	8 HDD	iSCSI ONVIF 3rd Party	p.90

HYBRID DVR

Model	Type	Image	Key SPEC							
			OS	CH	Resolution	Codec	Recording Speed	Max. HDD	ETC	Page
HVR-4781	4CH DVR		Linux	4CH	Up to 2M	H.264	120fps	1 HDD	-	p.91
HVR-8781	4CH DVR		Linux	8CH	Up to 2M	H.264	240fps	2 HDD	-	p.91
HVR-16781	4CH DVR		Linux	16CH	Up to 2M	H.264	240fps	2 HDD	-	p.91
HVR-8780	8CH DVR		Linux	8CH	Up to 2M	H.264	240fps	4 HDD	-	p.92
HVR-16780	16CH DVR		Linux	16CH	Up to 2M	H.264	240fps	4 HDD	-	p.92
HVR-16790	16CH DVR		Linux	16CH	Up to 2M	H.264	480fps	4 HDD	DVD Option	p.93

HNR-4530

4CH Built-in PoE Network Video Recorder



Key Features

- Real Time Full HD Recording and Up to 5MP Recording
- Built-in PoE Switch(IEEE 802.3af Support)
- Compatible with Onvif Supporting Cameras
- Full HD Display(VGA, HDMI)
- Built-in Discovery
- Internal 1 HDD
- 1 e-SATA, 3 USB Interface
- Alarm Input(4), Alarm Output(1)
- 48VDC

Key Functions

- H.264 High Profile Hardwired Codec
- S.M.A.R.T. Hard Disk Check
- Protect Video / Audio Clip from Overwrite
- Authentication of Data from Reproduction and Falsification
- Dashboard, DDNS, UPnP, NAT Traversal
- Small Recording File Size with Crystal Clear Picture Quality
- Adjustable Recording Frame Rate, Resolution and Picture Quality
- Video/Audio Data Backup in AVI / H.264 Format
- Configuration File Import / Export and Camera Setup Cloning
- Advanced Event Search Function
- Self-Diagnosis and Hardware Watch-Dog
- Remote Client Software, Webviewer, Mobile App

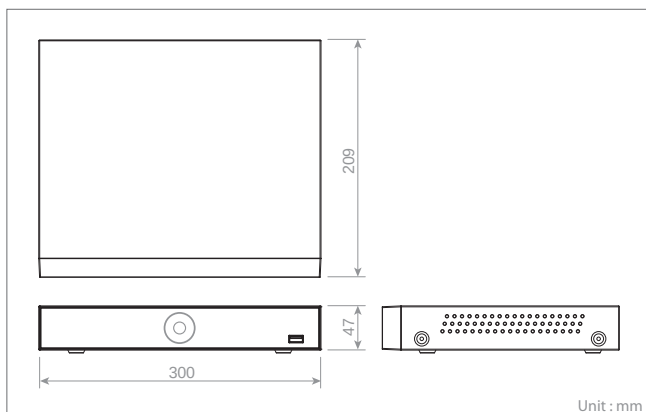
Series Model

- HNR-8540(8CH, 8 Port PoE)
- HNR-16560(16CH, 16 Port PoE)

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



Technical Specifications

Model	HNR-4530	
VIDEO		
Video Input	4 IP	
Video Input Resolution	Up to 5MP	
Compression	H.264	
Display Output	1 VGA, 1 HDMI	
Display Resolution	1920x1080, 1280x720, 1024x768	
Display Speed	100/120fps	
Display Mode	1/4 Split, Sequence	
RECORDING		
Recording Speed	100/120fps@5MP	
Max. Recording Throughput	32Mbps	
Recording Mode	Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic	
Pre Alarm	1~5sec	
Post Alarm	5sec~1hour	
PLAYBACK		
Simultaneous Playback	1/4 Split	
Playback Mode	Backward, Forward 2~64x	
Search Mode	Time, Event, Thumbnail, Text, Smart(Motion)	
STORAGE		
Internal HDD	1 SATA Interface	
External Storage	iSCSI	
Backup	USB	
Backup File Format	AVI, H4V	
FUNCTION		
3rd Party IP Camera	Support API or Onvif	
Text in	POS/ATM(VSSI-Pro, ASCII, Network)	
User Interface	Mouse, USB/RS485 Keyboard	
NETWORK		
Ethernet	WAN	1 RJ45 10/100/1000 Base-T
	PoE	4 RJ45 10/100 Base-T
	PoE Power	42W(IEEE802.3af Compliance)
Max. Output Throughput	Unlimited (Guarantee 72Mbps, Support Bandwidth Control)	
Remote Monitoring	CMS, Mobile, Web, Dashboard	
EXTERNAL IN/OUT		
Audio In	4 IP Camera	
Audio Out	1 RCA, 1 HD Output	
Alarm In	4 Input(Terminal Block)	
Alarm Out	1 Output(Terminal Block)	
Serial Port	USB to Serial	
USB	3 USB	
ETC		
Operating Humidity	0~90% RH(Non-Condensing)	
Operating Temperature	0~+45℃	
Power Supply	48VDC, 1.2A	
Power Consumption	14W(Include 1HDD, Without PoE)	
Dimension(WxHxD)	300x47x209mm	
Net Weight	Approx. 1kg(Exclude HDD)	

Specifications are subject to change without notice.



Key Functions

- H.264 High Profile Hardwired Codec
- S.M.A.R.T. Hard Disk Check
- Protect Video / Audio Clip from Overwrite
- Authentication of Data from Reproduction and Falsification
- Dashboard, DDNS, UPnP, NAT Traversal
- Small Recording File Size with Crystal Clear Picture Quality
- Adjustable Recording Frame Rate, Resolution and Picture Quality
- Video/Audio Data Backup in AVI / H.264 Format
- Configuration File Import / Export and Camera Setup Cloning
- Advanced Event Search Function
- Self-Diagnosis and Hardware Watch-Dog
- Remote Client Software, Webviewer, Mobile App

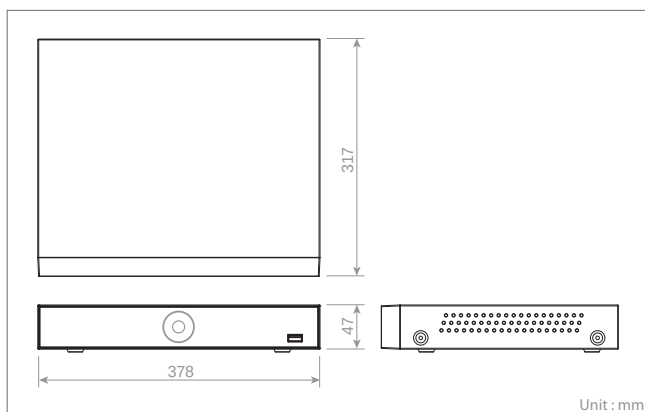
Series Model

- HNR-4530(4CH, 4 Port PoE)
- HNR-16560(16CH, 16 Port PoE)

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



HNR-8540/16560

8/16CH Built-in PoE Network Video Recorder

Key Features

- Real Time Full HD Recording and Up to 5MP Recording
- Built-in PoE Switch(IEEE 802.3af Support)
- Compatible with Onvif Supporting Cameras
- Full HD Display(VGA, HDMI)
- Built-in Discovery
- Internal 2 HDD
- 1 e-SATA, 3 USB Interface
- Alarm Input(8), Alarm Output(1)
- 48VDC

Technical Specifications

Model	HNR-8540	HNR-16560
VIDEO		
Video Input	8 IP	16 IP
Video Input Resolution	Up to 5MPx4CH + 3MPx4CH	Up to 5MPx4CH + 3MPx12CH
Compression	H.264	H.264
Display Output	1 VGA, 1 HDMI	1 VGA, 1 HDMI
Display Resolution	1920x1080, 1280x720, 1024x768	1920x1080, 1280x720, 1024x768
Display Speed	200/240fps	400/480fps
Display Mode	1/4/9 Split, Sequence	1/4/9/16 Split, Sequence
RECORDING		
Recording Speed	100/120fps@5MP + 100/120fps@3MP	100/120fps@5MP + 300/360fps@3MP
Max. Recording Throughput	64Mbps	128Mbps
Recording Mode	Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic	Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic
Pre Alarm	1~5sec	1~5sec
Post Alarm	5sec~1hour	5sec~1hour
PLAYBACK		
Simultaneous Playback	1/4/9 Split	1/4/9/16 Split
Playback Mode	Backward, Forward 2~64x	Backward, Forward 2~64x
Search Mode	Time, Event, Thumbnail, Text, Smart(Motion)	Time, Event, Thumbnail, Text, Smart(Motion)
STORAGE		
Internal HDD	2 SATA Interface	2 SATA Interface
External Storage	iSCSI	iSCSI
Backup	USB	USB
Backup File Format	AVI, H4V	AVI, H4V
FUNCTION		
3rd Party IP Camera	Support API or Onvif	Support API or Onvif
Text in	POS/ATM(VSSI-Pro, ASCII, Network)	POS/ATM(VSSI-Pro, ASCII, Network)
User Interface	Mouse, USB/RS485 Keyboard	Mouse, USB/RS485 Keyboard
NETWORK		
Ethernet	WAN	1 RJ45 10/100/1000 Base-T
	PoE	8 RJ45 10/100 Base-T
	PoE Power	74W(IEEE802.3af Compliance)
Max. Output Throughput	Unlimited (Guarantee 144Mbps, Support Bandwidth Control)	Unlimited (Guarantee 288Mbps, Support Bandwidth Control)
Remote Monitoring	CMS, Mobile, Web, Dashboard	CMS, Mobile, Web, Dashboard
EXTERNAL IN/OUT		
Audio In	8 IP Camera	16 IP Camera
Audio Out	1 RCA, 1 HD Output	1 RCA, 1 HD Output
Alarm In	8 Input(Terminal Block)	8 Input(Terminal Block)
Alarm Out	1 Output(Terminal Block)	1 Output(Terminal Block)
Serial Port	USB to Serial	USB to Serial
USB	2 USB	2 USB
ETC		
Operating Humidity	0~90% RH(Non-Condensing)	0~90% RH(Non-Condensing)
Operating Temperature	0~+45℃	0~+45℃
Power Supply	48VDC, 2A	110~220VAC, 3A
Power Consumption	20W(Include 2HDD, Without PoE)	20W(Include 2HDD, Without PoE)
Dimension(WxHxD)	378x47x317mm	378x47x317mm
Net Weight	Approx. 2.5kg(Exclude HDD)	Approx. 2.9kg(Exclude HDD)

Specifications are subject to change without notice.



HNR-16620/32620

16/32CH Built-in PoE Network Video Recorder

Key Features

- H.265, 4K Camera Support
- 16/32CH 4K Real Time Recording
- 4K Display Out Support
- Built-in 16CH PoE Switch
- Plug & Play Easy Connection
- 16/32CH Live Display
- 4 SATA Internal HDD, 1 e-SATA
- 2U 19" Rack Mountable

Key Functions

- User Friendly Modern User Interface
- Dual Recording(Main & Sub)
- Intelligent Recording Frame, Resolution & Quality Control
- Data Backup in AVI & MP4
- DDNS, DVRNS, Dashboard
- Advanced Search(Time, Event, Thumbnail, Text, Smart)
- Text(ATM/POS) Overlay

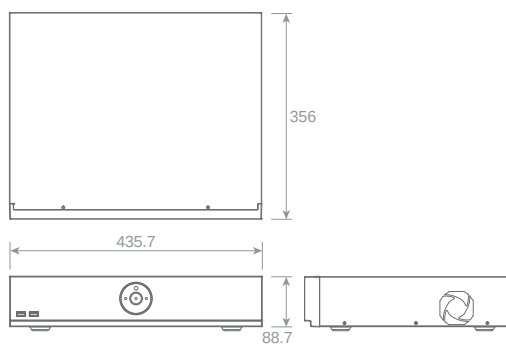
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

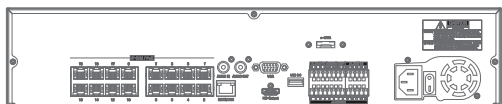
Optional Accessory

- HAS-08IR(8 Bay iSCSI Storage)
- HAS-16IR(16 Bay iSCSI Storage)

Dimension



Rear Features



Unit : mm

Technical Specifications

Model	HNR-16620	HNR-32620
VIDEO		
Video Input	16 IP	32 IP
Video Input Resolution	Up to 8MP	Up to 8MP
Compression	H.264, H.265	H.264, H.265
Display Output	1 VGA, 1 HDMI	1 VGA, 1 HDMI
Display Resolution	4K, 1920x1080, 1280x720, 1024x768	4K, 1920x1080, 1280x720, 1024x768
Display Speed	400/480fps	400/480fps
Display Mode	1/4/9/16 Split, Sequence, PIP	1/4/9/16/32 Split, Sequence, PIP
RECORDING		
Recording Speed	400/480fps@8MP	800/960fps@8MP
Max. Recording Throughput	128Mbps	256Mbps
Recording Mode	Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic	Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic
Pre Alarm	1~5sec	1~5sec
Post Alarm	5sec~1hour	5sec~1hour
PLAYBACK		
Simultaneous Playback	1/4/9/16 Split	1/4/9/16/32 Split
Playback Mode	Backward, Forward 2~64x	Backward, Forward 2~64x
Search Mode	Time, Event, Thumbnail, Text, Smart(Motion)	Time, Event, Thumbnail, Text, Smart(Motion)
STORAGE		
Internal HDD	4 SATA Interface	4 SATA Interface
External Storage	iSCSI, 1 e-SATA	iSCSI, 1 e-SATA
Backup	USB	USB
Backup File Format	AVI, H4V	AVI, H4V
FUNCTION		
Text in	POS/ATM(VSSI-Pro, ASCII, Network)	POS/ATM(VSSI-Pro, ASCII, Network)
User Interface	Mouse, USB/RS485 Keyboard	Mouse, USB/RS485 Keyboard
NETWORK		
Ethernet	WAN	1 RJ45 10/100/1000 Base-T
	PoE	16 RJ45 10/100 Base-T
	PoE Power	130W(IEEE802.3at Compliance)
Max. Output Throughput	Unlimited (Guarantee 576Mbps, Support Bandwidth Control)	Unlimited (Guarantee 576Mbps, Support Bandwidth Control)
Remote Monitoring	CMS, Mobile, Web, Dashboard	CMS, Mobile, Web, Dashboard
EXTERNAL IN/OUT		
Audio In	1 RCA, 16 IP Camera	1 RCA, 16 IP Camera
Audio Out	1 RCA, 1 HDMI	1 RCA, 1 HDMI
Alarm In	16 Input(Terminal Block)	16 Input(Terminal Block)
Alarm Out	1 Output(Terminal Block)	1 Output(Terminal Block)
Serial Port	1 RS485(Terminal Block)	1 RS485(Terminal Block)
USB	1 USB2.0(Front), 1 USB3.0(Rear)	2 USB2.0(Front), 1 USB3.0(Rear)
ETC		
Operating Humidity	0~90% RH(Non-Condensing)	0~90% RH(Non-Condensing)
Operating Temperature	0~+45℃	0~+45℃
Power Supply	110~220VAC	110~220VAC
Power Consumption	35W(Include 4HDD, Without PoE)	35W(Include 4HDD, Without PoE)
Dimension(WxHxD)	435.7x88.7x356mm	435.7x88.7x356mm
Net Weight	4.5kg(Exclude HDD)	4.5kg(Exclude HDD)

Specifications are subject to change without notice.



Key Functions

- User Friendly Modern User Interface
- Up to 32CH Realtime Live Display
- Up to 32CH Realtime Playback
- Advanced Search(Time, Event, Thumbnail, Text, Smart, VCA)
- NVR/DVR Remote Control(WARP)
- Data Backup in AVI & MP4
- Text(ATM/POS) Overlay
- Support Third-Party Cameras

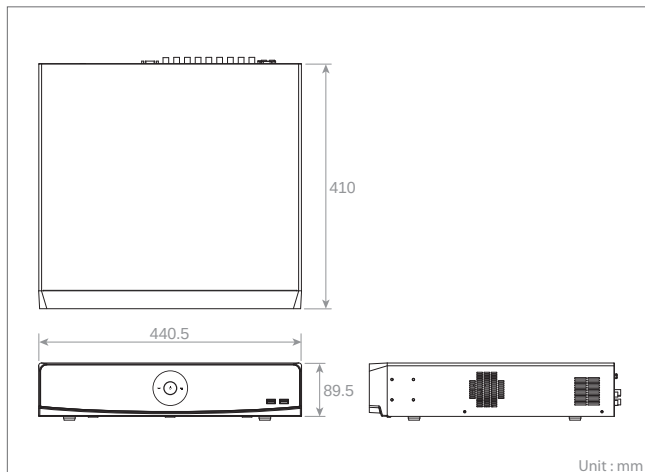
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HAS-08IR(8 Bay iSCSI Storage)
- HAS-16IR(16 Bay iSCSI Storage)

Dimension



HNR-32600

32CH Network Video Recorder

Key Features

- Support H.254, H.265 Compression
- Up to 32CH 4K Resolution Camera Recording
- 4K Video Display Out
- 2 gigabit Ethernet
- 2U 19" Rack Mountable

Technical Specifications

Model	HVM-32600
VIDEO	
Video Input	32 IP
Video Input Resolution	Up to 8MP
Compression	H.264, H.265
Display Output	1 HDMI
Display Resolution	3840x2160, 1920x1080
Display Speed	800/960fps
Display Mode	1/4/9/16/36 Split, Sequence, PIP
RECORDING	
Recording Speed	800/960fps@8MP
Max. Recording Throughput	256Mbps
Recording Mode	Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic
Pre Alarm	1~5sec
Post Alarm	5sec~1hour
PLAYBACK	
Simultaneous Playback	1/4/9/16/36 Split
Playback Mode	Backward, Forward 2~64x
Search Mode	Time, Event, Thumbnail, Smart(Motion), Text, VCA
STORAGE	
Internal HDD	4 SATA Interface(4 HDD)
Backup	USB
Backup File Format	AVI, H4V
FUNCTION	
Text in	POS/ATM(VSSI-Pro, ASCII, Network)
User Interface	Mouse, USB/RS485 Keyboard
NETWORK	
Ethernet	2 RJ45 10/100/1000 Base-T
Max. Output Throughput	Unlimited (Guarantee 576Mbps, Support Bandwidth Control)
Remote Monitoring	CMS, Mobile, Web, Dashboard
EXTERNAL IN/OUT	
Audio In	1 RCA, 32 Network Audio
Audio Out	1 RCA, 1 HDMI
Alarm In	4 Input(Terminal Block), 32 Network
Alarm Out	2 Output(Terminal Block)
Serial Port	2 RS485(Terminal Block)
USB	2 USB2.0(Front), 1 USB3.0(Rear)
ETC	
Operating Humidity	0~90% RH(Non-Condensing)
Operating Temperature	0~+45 °C
Power Supply	12VDC/7A
Power Consumption	50W(Include 4HDD)
Dimension(WxHxD)	440.5(W)x89.5(H)x410(D)mm
Net Weight	Approx. 5.1kg(Exclude HDD)

Specifications are subject to change without notice.



HNR-32600S/64600S

32/64CH Network Video Recorder

Key Features

- Support H.254, H.265 Compression
- Up to 64CH 4K Resolution Camera Recording
- 4K Video Display Out
- 2 gigabit Ethernet
- 8 Bay Removable HDD
- Redundant Power Supply
- 2U 19" Rack Mountable

Key Functions

- User Friendly Modern User Interface
- Up to 64CH Realtime Live Display
- Up to 64CH Realtime Playback
- Advanced Search(Time, Event, Thumbnail, Text, Smart, VCA)
- NVR/DVR Remote Control(WARP)
- Text(ATM/POS) Overlay
- Support Third-Party Cameras

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Technical Specifications

Model	HNR-32600S	HNR-64600S
VIDEO		
Video Input	32 IP	64 IP
Video Input Resolution	Up to 8MP	Up to 8MP
Compression	H.264, H.265	H.264, H.265
Display Output	1 HDMI	1 HDMI
Display Resolution	3840x2160, 1920x1080	3840x2160, 1920x1080
Display Speed	800/960fps	1600/1920fps
Display Mode	1/4/9/16/25/30/36 Split, Sequence, PIP	1/4/9/16/25/30/36/64 Split, Sequence, PIP
RECORDING		
Recording Speed	800/960fps@8MP	1600/1920fps@8MP
Max. Recording Throughput	256Mbps	512Mbps
Recording Mode	Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic	Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic
Pre Alarm	1~5sec	1~5sec
Post Alarm	5sec~1hour	5sec~1hour
PLAYBACK		
Simultaneous Playback	1/4/9/16/25/30/36 Split	1/4/9/16/25/30/36/64 Split
Playback Mode	Backward, Forward 2~64x	Backward, Forward 2~64x
Search Mode	Time, Event, Thumbnail, Smart(Motion), Text	Time, Event, Thumbnail, Smart(Motion), Text, VCA
STORAGE		
Internal HDD	8 SATA Interface(8 HDD)	8 SATA Interface(8 HDD)
RAID	0, 1, 5, 10	0, 1, 5, 10
Backup	USB	USB
Backup File Format	AVI, H4V	AVI, H4V
FUNCTION		
Text in	POS/ATM(VSSI-Pro, ASCII, Network)	POS/ATM(VSSI-Pro, ASCII, Network)
User Interface	Mouse, USB/RS485 Keyboard	Mouse, USB/RS485 Keyboard
NETWORK		
Ethernet	2 RJ45 10/100/1000 Base-T	2 RJ45 10/100/1000 Base-T
Max. Output Throughput	Unlimited (Guarantee 576Mbps, Support Bandwidth Control)	
Remote Monitoring	CMS, Mobile, Web, Dashboard	CMS, Mobile, Web, Dashboard
EXTERNAL IN/OUT		
Audio In	1 RCA, 32 Network	1 RCA, 64 Network
Audio Out	1 RCA, 1 HDMI	1 RCA, 1 HDMI
Alarm In	4 Input(Terminal Block), 32 Network	4 Input(Terminal Block), 64 Network
Alarm Out	2 Output(Terminal Block)	2 Output(Terminal Block)
Serial Port	2 RS485(Terminal Block)	2 RS485(Terminal Block)
USB	2 USB2.0(Front), 1 USB3.0(Rear)	2 USB2.0(Front), 1 USB3.0(Rear)
ETC		
Operating Humidity	0~90% RH(Non-Condensing)	0~90% RH(Non-Condensing)
Operating Temperature	0~+45℃	0~+45℃
Power Supply	110~220VAC, Dual Power	110~220VAC, Dual Power
Power Consumption	80W(Include 8HDD)	80W(Include 8HDD)
Dimension(WxHxD)	437.2(W)x88(H)x550(D)mm	437.2(W)x88(H)x550(D)mm
Net Weight	TBD	TBD

Specifications are subject to change without notice.

HVR-4781



HVR-8781/16781



Key Functions

- Camera Menu and PTZ Control over Coax Cable
- DDNS, DVRNS, Dashboard
- Advanced Event Search
- Digital Zoom In/Out in Live/Playback(x2, x4, x6, x8)
- ATM/POS Support
- S.M.A.R.T. Health Check

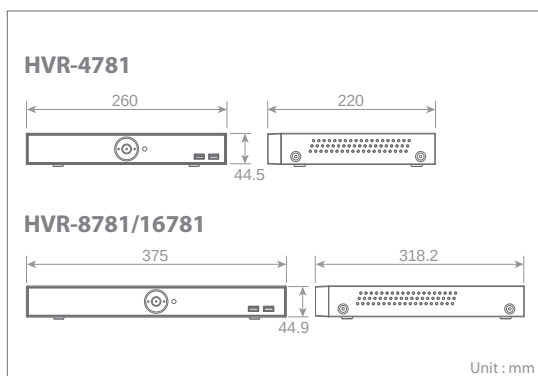
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HAS-08IR(8 Bay iSCSI Storage)
- HAS-16IR(16 Bay iSCSI Storage)

Dimension



HVR-4781/8781/16781

2MP HD Hybrid Digital Video Recorder

Key Features

- Support AHD, TVI, 960H and D1 Camera
- Real Time Full HD Live/Playback with Smart Display
- Up to 240fps Full HD Recording
- Dual Recording(Main-Full HD, Sub-VGA)
- Audio In/Out
- Alarm In/Out
- Internal HDD : 1xSATA(4CH), 2xSATA(8/16CH)

Technical Specifications

Model	HVR-4781	HVR-8781	HVR-16781
VIDEO			
Video Input Channel	Up to 4CH (4 BNC, 1 IP Configurable)	Up to 8CH (8 BNC, 2 IP Configurable)	Up to 16CH (16 BNC, 4 IP Configurable)
Video Input Type	AHD, TVI, CVBS, IP	AHD, TVI, CVBS, IP	AHD, TVI, CVBS, IP
Video Input Resolution	1080p, 720p, 960H, D1(CVBS) Up to 3M	1080p, 720p, 960H, D1(CVBS) Up to 3M	1080p, 720p, 960H, D1(CVBS) Up to 3M
Display Output	1 VGA, 1 HD Output	1 VGA, 1 HD Output, 1 BNC(Spot, CVBS)	1 VGA, 1 HD Output, 1 BNC(Spot, CVBS)
Display Resolution	VGA, HD Output Spot	1920x1080, 1280x720, 1024x768 1.0 Vp-p(75ohm, Composite)	1920x1080, 1280x720, 1024x768 1.0 Vp-p(75ohm, Composite)
Display Speed	100/120fps	200/240fps	400/480fps
Display Mode	VGA, HD Output Spot	1/4 Split, Sequence 1/8 Split, Sequence	1/4/9/16 Split, Sequence 1/16 Split, Sequence
RECORDING			
Compression	H.264	H.264	H.264
Recording Resolution	1080p, 720p, 960H Up to 3M	1080p, 720p, 960H Up to 3M	1080p, 720p, 960H Up to 3M
Recording Speed	Main Stream : 100/120fps@1080p Sub Stream : 100/120fps@VGA	Main Stream : 200/240fps@1080p Sub Stream : 200/240fps@VGA	Main Stream : 200/240fps@1080p Sub Stream : 200/240fps@VGA
Recording Mode	Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic	Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic	Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic
Pre Alarm	1~5sec	1~5sec	1~5sec
Post Alarm	5sec~10min	5sec~10min	5sec~10min
PLAYBACK			
Simultaneous Playback	1/4 Split	1/4/9 Split	1/4/9/16 Split
Playback Mode	Backward, Forward 2~64x	Backward, Forward 2~64x	Backward, Forward 2~64x
Search Mode	Time, Event, Thumbnail, Text, Smart(Motion)	Time, Event, Thumbnail, Text, Smart(Motion)	Time, Event, Thumbnail, Text, Smart(Motion)
STORAGE			
Internal HDD	1 SATA Interface	2 SATA Interface	2 SATA Interface
External Storage	iSCSI	iSCSI	iSCSI
Backup	USB, Cloud	USB, Cloud	USB, Cloud
Backup File Format	AVI, H4V, MP4	AVI, H4V, MP4	AVI, H4V, MP4
FUNCTION			
PTZ & OSD Control	RS485, UTC	RS485, UTC	RS485, UTC
Text in	POS/ATM(Network, RS485, USB)	POS/ATM(Network, RS485, USB)	POS/ATM(Network, RS485, USB)
User Interface	Mouse, USB/RS485 Keyboard	Mouse, USB/RS485 Keyboard	Mouse, USB/RS485 Keyboard
NETWORK			
PTZ & OSD Control	1 RJ45 10/100/1000 Base-T	1 RJ45 10/100/1000 Base-T	1 RJ45 10/100/1000 Base-T
Max. Network Throughput	Unlimited (Guarantee 72Mbps, Support Bandwidth Control)	Unlimited (Guarantee 72Mbps, Support Bandwidth Control)	Unlimited (Guarantee 72Mbps, Support Bandwidth Control)
Remote Monitoring	CMS, Mobile, Web, Dashboard	CMS, Mobile, Web, Dashboard	CMS, Mobile, Web, Dashboard
EXTERNAL IN/OUT			
Audio	1 RCA Input / 1 RCA Output, 1 HD Output	4 RCA Input / 1 RCA Output, 1 HD Output	4 RCA Input / 1 RCA Output, 1 HD Output
Alarm	4 Input / 1 Output(Terminal Block)	4 Input / 1 Output(Terminal Block)	4 Input / 1 Output(Terminal Block)
Serial Port	1 RS485(Terminal Block)	1 RS485(Terminal Block)	1 RS485(Terminal Block)
USB	2 USB(Front)	2 USB(Front)	2 USB(Front)
ETC			
Operating Humidity	0~90% RH(Non-Condensing)	0~90% RH(Non-Condensing)	0~90% RH(Non-Condensing)
Operating Temperature	0~+45℃	0~+45℃	0~+45℃
Power Supply	12VDC, 2A	12VDC, 3A	12VDC, 5A
Power Consumption	Max. 19.2W(Include 1HDD)	Max. 28.8W(Include 2HDD)	Max. 36W(Include 1HDD)
Dimension(WxHxD)	260x44.5x220mm	375x44.9x318.2mm	375x44.9x318.2mm
Net Weight	0.8kg(Exclude HDD)	1.7kg(Exclude HDD)	1.8kg(Exclude HDD)

Specifications are subject to change without notice.



HVR-8780/16780

2MP HD Hybrid Digital Video Recorder

Key Features

- Support AHD, TVI, 960H and D1 Camera
- Real Time Full HD Live/Playback with Smart Display
- Up to 240fps Full HD Recording
- Dual Recording(Main-Full, Sub-VGA)
- Audio In/Out
- Alarm In/Out
- Internal HDD : 4xSATA Port
- 2U 19" Rack Mountable

Key Functions

- Camera Menu and PTZ Control over Coax Cable
- DDNS, DVRNS, Dashboard
- Advanced Event Search
- Digital Zoom In/Out in Live/Playback(x2, x4, x6, x8)
- ATM/POS Support
- S.M.A.R.T. Health Check

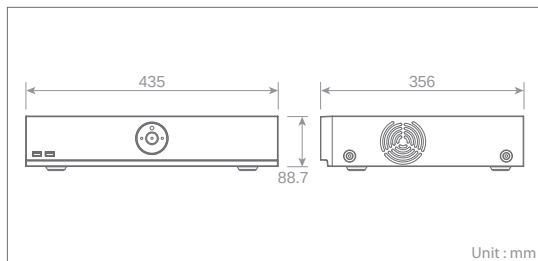
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HAS-08IR(8 Bay iSCSI Storage)
- HAS-16IR(16 Bay iSCSI Storage)

Dimension



Technical Specifications

Model	HVR-8780	HVR-16780
VIDEO		
Video Input Channel	Up to 8CH (8 BNC, 2 IP Configurable)	Up to 16CH (16 BNC, 4 IP Configurable)
Video Input Type	AHD, TVI, CVBS, IP	AHD, TVI, CVBS, IP
Video Input Resolution	BNC: 1080p, 720p, 960H, D1(CVBS) IP: Up to 3M	1080p, 720p, 960H, D1(CVBS) Up to 3M
Display Output	1 VGA, 1 HD Output, 1 BNC(Spot, CVBS)	1 VGA, 1 HD Output, 1 BNC(Spot, CVBS)
Display Resolution	VGA, HD Output: 1920x1080, 1280x720, 1024x768 Spot: 1.0 Vp-p(75ohm, Composite)	1920x1080, 1280x720, 1024x768 1.0 Vp-p(75ohm, Composite)
Display Speed	200/240fps	400/480fps
Display Mode	VGA, HD Output: 1/4/9 Split, PIP, Sequence Spot: 1/8 Split, Sequence	1/4/9/16 Split, Sequence 1/16 Split, Sequence
RECORDING		
Compression	H.264	H.264
Recording Resolution	BNC: 1080p, 720p, 960H IP: Up to 3M	1080p, 720p, 960H Up to 3M
Recording Speed	Main Stream : 200/240fps@1080p Sub Stream : 200/240fps@VGA	Main Stream : 200/240fps@1080p Sub Stream : 200/240fps@VGA
Recording Mode	Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic	Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic
Pre Alarm	1~5sec	1~5sec
Post Alarm	5sec~10min	5sec~10min
PLAYBACK		
Simultaneous Playback	1/4/9 Split	1/4/9/16 Split
Playback Mode	Backward, Forward 2~64x	Backward, Forward 2~64x
Search Mode	Time, Event, Thumbnail, Text, Smart(Motion)	Time, Event, Thumbnail, Text, Smart(Motion)
STORAGE		
Internal HDD	4 SATA Interface	4 SATA Interface
External Storage	iSCSI	iSCSI
Backup	USB, Cloud	USB, Cloud
Backup File Format	AVI, H4V, MP4	AVI, H4V, MP4
FUNCTION		
PTZ & OSD Control	RS485, UTC	RS485, UTC
Text in	POS/ATM(Network, RS485, USB)	POS/ATM(Network, RS485, USB)
User Interface	Mouse, USB/RS485 Keyboard	Mouse, USB/RS485 Keyboard
NETWORK		
PTZ & OSD Control	1 RJ45 10/100/1000 Base-T	1 RJ45 10/100/1000 Base-T
Max. Network Throughput	Unlimited (Guarantee 72Mbps, Support Bandwidth Control)	Unlimited (Guarantee 72Mbps, Support Bandwidth Control)
Remote Monitoring	CMS, Mobile, Web, Dashboard	CMS, Mobile, Web, Dashboard
EXTERNAL IN/OUT		
Audio	8 Input(4 RCA+4 D-sub) / 1 RCA Output, 1 HD Output	16 Input(4 RCA+12 D-sub) / 1 RCA Output, 1 HD Output
Alarm	8 Input / 1 Output(Terminal Block)	16 Input / 1 Output(Terminal Block)
Serial Port	1 RS485(Terminal Block)	1 RS485(Terminal Block)
USB	2 USB(Front)	2 USB(Front)
ETC		
Operating Humidity	0~90% RH(Non-Condensing)	0~90% RH(Non-Condensing)
Operating Temperature	0~+45 °C	0~+45 °C
Power Supply	12VDC, 5A	12VDC, 5A
Power Consumption	Max. 35.4W(Include 4HDD)	Max. 41.4W(Include 4HDD)
Dimension(WxHxD)	435.7x88.7x356mm	435.7x88.7x356mm
Net Weight	3.7kg(Exclude HDD)	3.8kg(Exclude HDD)

Specifications are subject to change without notice.



Key Functions

- User Friendly Modern User Interface
- Dual Recording(Main & Sub)
- Intelligent Recording Frame, Resolution & Quality Control
- Data Back-up in AVI & MP4
- DDNS, DVRNS & Dashboard Support
- Advanced Search(Time, Event, Thumbnail, Text, Smart)
- Text(ATM/POS) Overlay

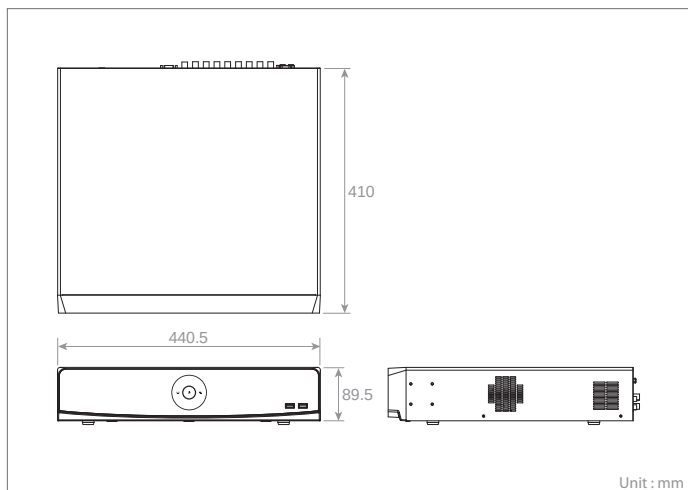
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Optional Accessory

- HAS-08I(8 Bay iSCSI Storage)
- HAS-16I(16 Bay iSCSI Storage)

Dimension



HVR-16790

2MP HD Hybrid Digital Video Recorder

Key Features

- Support AHD, TVI, 960H and D1 Camera
- Real Time Full HD Live/Playback with Smart Display
- Up to 480fps Full HD Recording
- 16CH Loop Out
- Spot Out
- Audio In/Out(16/1)
- Alarm In/Out(16/4)
- Internal HDD : 4xSATA Port
- 2U 19" Rack Mountable

Technical Specifications

Model		HVR-16790
VIDEO		
Video Input Channel		Up to 16CH (16 BNC, 4 IP Configurable)
Video Input Type		AHD, TVI, CVBS, IP
Video Input Resolution	BNC	1080p, 720p, 960H, D1(CVBS)
	IP	Up to 3M
Display Output		1 VGA, 1 HDMI, 16BNC(Looping), 1 BNC(Spot, CVBS)
Display Resolution	VGA, HD Output	3840x2160, 1920x1080, 1280x720, 1024x768
	Spot	1.0 Vp-p(75ohm, Composite)
Display Speed		Up to 480fps
Display Mode	VGA, HD Output	1/4/9/16 Split, PIP, Sequence
	Spot	1/16 Split, Sequence
RECORDING		
Compression		H.264
Recording Resolution	BNC	1080p, 720p, 960H
	IP	Up to 3M
Recording Speed		Main Stream : 480fps@1080p Sub Stream : 480fps@VGA
Recording Mode		Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic
Pre Alarm		1~5sec
Post Alarm		5sec~10min
PLAYBACK		
Simultaneous Playback		1/4/9/16 Split
Playback Mode		Backward, Forward 2~64x
Search Mode		Time, Event, Thumbnail, Text, Smart(Motion)
STORAGE		
Internal HDD		4 SATA Interface
External Storage		iSCSI
Backup		USB, DVD(Optional)
Backup File Format		AVI, H4V, MP4
FUNCTION		
PTZ & OSD Control		RS485, UTC
Text in		POS/ATM(Network, RS485, USB)
User Interface		Mouse, USB/RS485 Keyboard
NETWORK		
PTZ & OSD Control		1 RJ45 10/100/1000 Base-T
Max. Network Throughput		Unlimited (Guarantee 288Mbps, Support Bandwidth Control)
Remote Monitoring		CMS, Mobile, Web, Dashboard
EXTERNAL IN/OUT		
Audio		16 RCA Input / 1 RCA Output, 1 HD Output
Alarm		16 Input / 4 Output(Terminal Block)
Serial Port		2 RS485(Terminal Block)
USB		2 USB(Front)
ETC		
Operating Humidity		0~90% RH(Non-Condensing)
Operating Temperature		0~+45℃
Power Supply		12VDC, 7A
Power Consumption		68W(Include 4HDD, ODD)
Dimension(WxHxD)		440.5(W)x89.5(H)x410(D)mm
Net Weight		Approx. 5.2kg(Exclude HDD)

Specifications are subject to change without notice.

VIRTUAL MATRIX

Model	Type	Image	Key SPEC					
			OS	CH	Resolution	Codec	Max. HDD	Page
HVM-64600	64CH VM		Linux	64CH	Up to 4K	H.265 H.264	4 HDDs	p.96
HVM-80600S	128CH VM		Linux	128CH	Up to 4K	H.265 H.264	8 HDDs	p.97



Key Functions

- H.265/H.264 Support
- Warp Live, Playback, Setup & Search
- Virtual Matrix Live, Recording, Playback, Setup & Search
- S.M.A.R.T Hard Disk Check
- Protect Video/Audio Clip from Overwrite
- Authentication of Data from Reproduction and Falsification
- Small Recording File Size with Crystal Clear Picture Quality
- Configuration File Import/Export and Camera Setup Cloning
- Advanced Event Search Function
- Self-Diagnosis and Hardware Watch-Dog

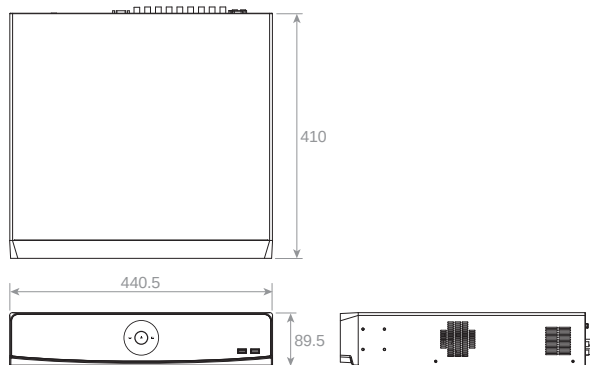
Series Model

- Virtual Matrix PRO 128CH

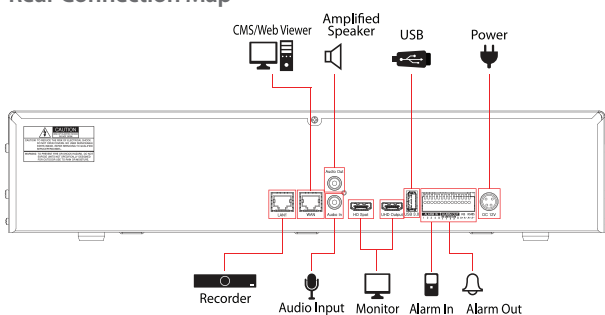
Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



Rear Connection Map



Unit : mm

HVM-64600

64CH Virtual Matrix

Key Features

- 64CH Max. PC-less Recorder Access
- 64CH Max. Remote Monitoring System
- 64CH Max. Backup Recording
- Warp Support
- Dual Monitor Output
- Internal 4 HDD, iSCSI Support
- 2U 19" Rack Mount

Technical Specifications

Model	HVM-64600
VIDEO	
Video Input Resolution	Up to 8MP
Compression	H.264, H.265
Display Output	2 HDMI
Display Resolution	Main : 3840x2160, 1920x1080 / Sub : 1920x1080
Display Speed	800/960fps
Display Mode	1/4/9/16/36/64 Split, Sequence, PIP
RECORDING	
Recording Speed	800/960fps@8MP
Max. Recording Throughput	512Mbps
Recording Mode	Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic
Pre Alarm	1~5sec
Post Alarm	5sec~1hour
PLAYBACK	
Simultaneous Playback	1/4/9/16/36/64 Split, Sequence
Playback Mode	Backward, Forward 2~64x
Search Mode	Time, Event, Thumbnail
STORAGE	
Internal HDD	4 SATA Interface
RAID	0, 1, 5, 10
Backup	USB
Backup File Format	AVI, MP4, Clipviewer
FUNCTION	
User Interface	Mouse, USB/RS485 Keyboard, Remote Controller(Optional)
WARP	Live, Playback, Setup & Search
Virtual Matrix	64CH Max. Live, Recording, Playback, Setup & Search
NETWORK	
Ethernet	WAN 2 RJ45 10/100/1000 Base-T
Max. Output Throughput	Unlimited (Guarantee 576Mbps, Support Bandwidth Control)
Remote Monitoring	CMS, Mobile
EXTERNAL IN/OUT	
Audio In	1 RCA(Mic), 64 Network Audio
Audio Out	1 RCA, 1 HDMI
Alarm In	4 Input(Terminal Block) 64 Network Alarm
Alarm Out	2 Output(Terminal Block)
Serial Port	2 RS485(Terminal Block)
USB	2 USB2.0(Front), 1 USB3.0(Rear)
ETC	
Operating Humidity	0~90% RH(Non-Condensing)
Operating Temperature	0~+45℃
Power Supply	12VDC/7A
Power Consumption	50W(Include 4HDD)
Dimension(WxHxD)	440.5(W)x89.5(H)x410(D)mm
Net Weight	Approx. 5.1kg(Exclude HDD)

Specifications are subject to change without notice.



Key Functions

- 128CH PC-less Monitoring System
- User Friendly Modern User Interface
- Up to 128CH Live Monitoring and Playback
- Drag & Drop Device Setup
- Advanced Search(Time, Event, Thumbnail)
- NVR/DVR Remote Control(WARP)
- NVR/DVR Back-up Recording

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

HVM-80600S

128CH Virtual Matrix Pro

Key Features

- Support H.254, H.265 Compression
- Up to 128CH NVR/DVR Control
- 4K Video Display Out
- Support 4 Monitor Out
- 3 gigabit Ethernet
- 8 Bay Removable HDD
- Redundant Power Supply
- 2U 19" Rack Mountable

Technical Specifications

Model	HVM-80600S
VIDEO	
Video Input Resolution	Up to 8MP
Compression	H.264, H.265
Display Output	4 HDMI
Display Resolution	Main : 3840x2160, 1920x1080 / Sub : 1920x1080
Display Speed	1600/1920fps
Display Mode	1/4/9/16/36/64 Split, Sequence, PIP
RECORDING	
Recording Speed	3200/3840fps@8MP
Max. Recording Throughput	512Mbps x 2 Port
Recording Mode	Continuous, Motion, Alarm, C+M, C+A, M+A, C+M+A, Panic
Pre Alarm	1~5sec
Post Alarm	5sec~1hour
PLAYBACK	
Simultaneous Playback	1/4/9/16/36/64 Split, Sequence
Playback Mode	Backward, Forward 2~64x
Search Mode	Time, Event, Thumbnail
STORAGE	
Internal HDD	8 SATA Interface
Backup	USB
RAID	0, 1, 5, 10
Backup File Format	H4V, MP4
FUNCTION	
User Interface	Mouse, USB/RS485 Keyboard
WARP	Live, Playback, Setup & Search
Virtual Matrix	128CH Max. Live, Recording, Playback, Setup & Search
NETWORK	
Ethernet	3 RJ45 10/100/1000 Base-T
Max. Output Throughput	Unlimited (Guarantee 576Mbps, Support Bandwidth Control)
Remote Monitoring	CMS, Mobile
EXTERNAL IN/OUT	
Audio In	1 RCA(Mic), 128 Network Audio
Audio Out	1 RCA, 1 HD Output
Alarm In	4 Input(Terminal Block) 128 Network Alarm
Alarm Out	2 Output(Terminal Block)
Serial Port	2 RS485(Terminal Block)
USB	2 USB2.0(Front), 1 USB3.0(Rear)
ETC	
Operating Humidity	0~90% RH(Non-Condensing)
Operating Temperature	0~+45℃
Power Supply	110~220VAC, Dual Power
Power Consumption	80W(Include 8HDD)
Dimension(WxHxD)	437.2(W)x88(H)x550(D)mm
Net Weight	TBD

Specifications are subject to change without notice.



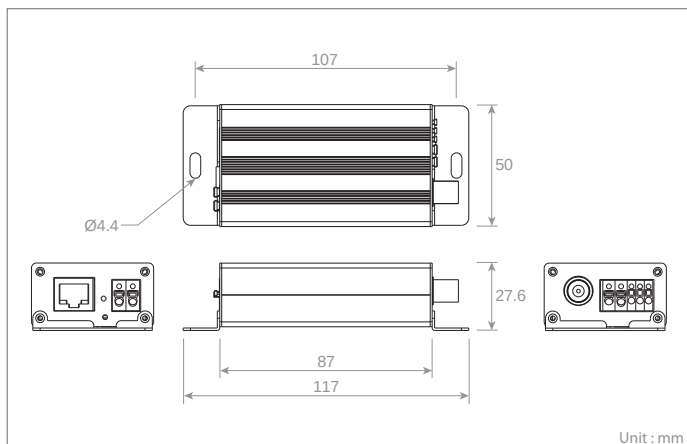
Key Functions

- Dual or Triple Stream(H.264, MJPEG)
- Onvif
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



HAE-001

HD Video Encoder

Key Features

- 1CH HD Encoder
- TVI, AHD, CVBS Multi Format Video Input
- 2MP Resolution
- PTZ Control through UTC & RS485
- DC 12V Power Sharing with Camera

Technical Specifications

Model	HAE-001
VIDEO/AUDIO	
Video Input	TVI, AHD, CVBS
Video Compression	H.264
Resolution	1080p, 720p, 960H, D1
Frame Rate	25/30fps@1080p
Audio Compression	-
Audio Stream	-
Local Display Output	-
Local Display Resolution	-
Local Display Speed	-
Local Display Mode	-
NETWORK	
Interface	1 RJ45 10/100 Base-T
Protocol	TCP/IP, UDP, DHCP, uPNP, DDNS, Zeroconf, Bonjour
Max. Network Throughout	100Mbps
Security	HTTPS, SSL, Multi User Authority
EXTERNAL IN/OUT(CONTROL)	
Video In	1 BNC Input
Audio	-
Alarm	-
Power In	2 Pin Terminal Block
Power Out	2 Pin Terminal Block
Ethernet	RJ45
Serial Port	RS485(Terminal Block)
PTZ Control	UTC, RS485
LED Indicator	Video Detector LED
ETC	
Operating Humidity	0~90% RH(Non-Condensing)
Operating Temperature	0~+45 °C
Power Supply	12VDC
Power Consumption	200mA(2.5W)
Dimension(WxHxD)	50(W)x27.6(H)x117(D)mm
Net Weight	Approx. 105g

Specifications are subject to change without notice.



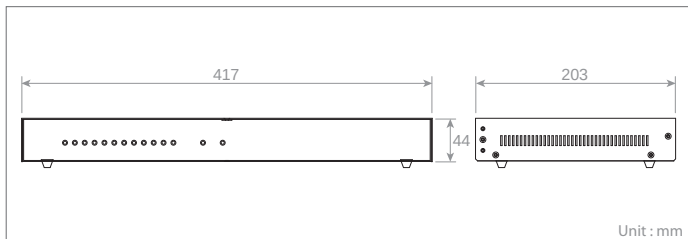
Key Functions

- Dual Profile-S Stream(H.264)
- Onvif
- Easy Install : Zero Configuration, Discovery, PoE
- Multi User Authority, IP Filtering, HTTPS, SSL
- Cross Web Browsing(IE, Safari, Firefox, Chrome)
- Privacy Masking
- 19" Rack Mountable
- HDMI Output

Software

- SmartManager
- Titanium 2.0
- Titanium Mobile

Dimension



HAE-012

HD Video Encoder

Key Features

- 12CH HD Encoder
- TVI, AHD, CVBS Multi Format Video Input
- 2MP Resolution, 50/60fps
- PTZ Control through UTC & RS485

Technical Specifications

Model	HAE-012
VIDEO/AUDIO	
Video Input	TVI, AHD, CVBS
Video Compression	H.264
Resolution	1080p, 720p, 960H, D1
Frame Rate	200/240fps@1080p
Audio Compression	G.711
Audio Stream	2 Way
Local Display Output	1 HD Output
Local Display Resolution	1920x1080, 1280x720, 1024x768
Local Display Speed	300/360fps
Local Display Mode	1/4/9/16 Split, PIP, Sequence
NETWORK	
Interface	1 RJ45 10/100/1000 Base-T
Protocol	TCP/IP, UDP, DHCP, uPNP, DDNS, Zeroconf, Bonjour
Max. Network Throughout	288Mbps(Support Bandwidth Control)
Security	HTTPS, SSL, Multi User Authority
EXTERNAL IN/OUT(CONTROL)	
Video In	12 BNC Input
Audio	4 Input / 1 Output(RCA)
Alarm	12 Input / 1 Output(Terminal Block)
Power In	DC Jack
Power Out	-
Ethernet	1 RJ45
Serial Port	1 RS485(Terminal Block), 2 USB
PTZ Control	UTC, RS485
LED Indicator	14 Status LED(12 Camera, 1 Ethernet, 1 Power)
ETC	
Operating Humidity	0~90% RH(Non-Condensing)
Operating Temperature	0~+45 °C
Power Supply	12VDC, 2A
Power Consumption	1.1A(13.2W)
Dimension(WxHxD)	417(W)x44(H)x203(D)mm
Net Weight	Approx. 2.1kg

Specifications are subject to change without notice.



HAS-08IR



HAS-16IR



HAS-08IR/16IR

8/16 Bay iSCSI Storage RAID 0, 10, 5, RAID 5+Hot Standby, RAID 6

Key Features

- Smart iSCSI Storage with 8/16 HDD Bays
- One Touch Set-up with RAID 5
- Hot Swappable Disk Drive Bay
- LCD Display for System Status
- Quick and Easy Install

Technical Specifications

Model	HAS-08IR	HAS-16IR
GENERAL		
OS	Linux	
Network Protocols	iSCSI(IP-SAN), DHCP, HTTP, TCP/IP, UDP/IP, SNMP v1/v2c, SMTP, DNS, NTP	
Supported RAID Level	RAID0, RAID10, RAID5, RAID5+Hot Standby, RAID6	
Maxium iSCSI Volume	4	8
Network Bonding	Failover and Load Balancing	
One-Touch Button Setup	Creates a RAID5 Volume and an iSCSI Target Node(s)	
HARDWARE		
CPU	ARM v7 Quad Core 1.6GHz	
Floating Point	Yes	
RAM Size	DDR3 2.0 GB(Expandable up to 8GB)	
Internal HDD	3.5" SATA(III) / SATA(II)x8	3.5" SATA(III) / SATA(II)x16
	Hardware RAID PCI Express to SATA Solution	
Hot Swappable HDD	Yes	
LAN	1Gbps RJ-45 Port x 2	
ETC		
Dimension	482(W)x88(H)x416(D)	482(W)x133(H)x548(D)
Weight	8.8kg(without HDDs)	16kg(without HDDs)
Frequency	50~60Hz	
AC Voltage, Power	100~240VAC, 250W	100~240VAC, 520W(Redundant)
Current	3.0/1.5A at 115/230V	8.5/4A at 100/240V

Specifications are subject to change without notice.

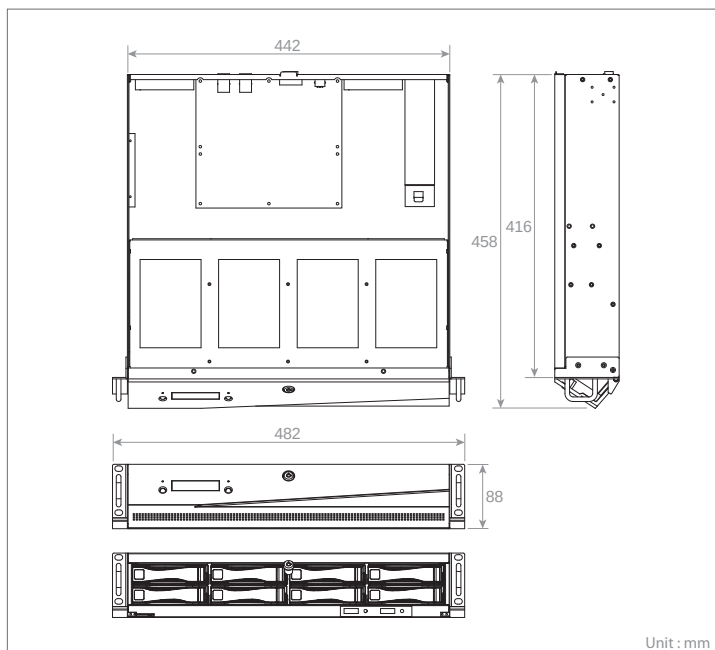
Key Functions

- Support RAID 0, 10, 5, 5+Hot Standby, 6
- Network Bonding Supports for Failover and Load Balance
- HDD Failure Notice by LCD Display & Beep, Email Notification
- 19" Rack Mountable

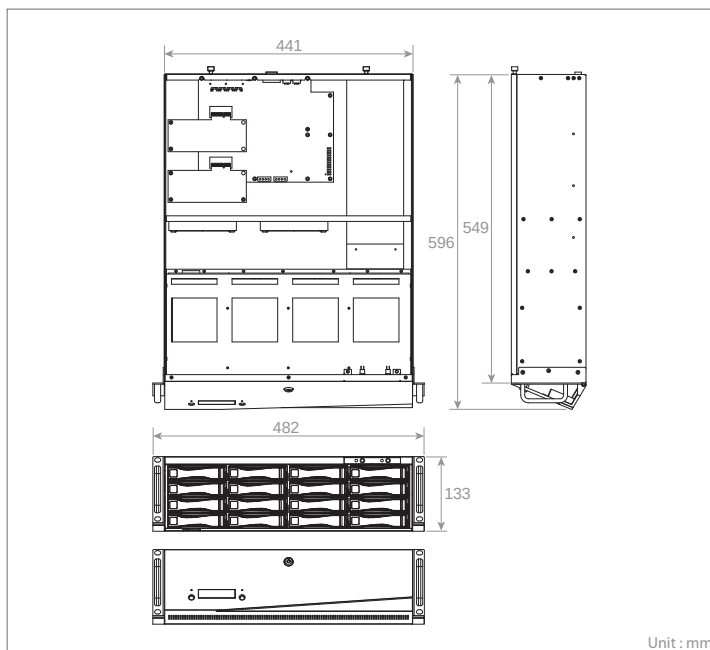
Software

- Remote Manager(Windows 7/8/8.1/10, OSX 10.8 above)

Dimension(HAS-08IR)



Dimension(HAS-16IR)



HAP-SW04F

4 Port PoE Ethernet Switch with Optical Uplink



Key Features

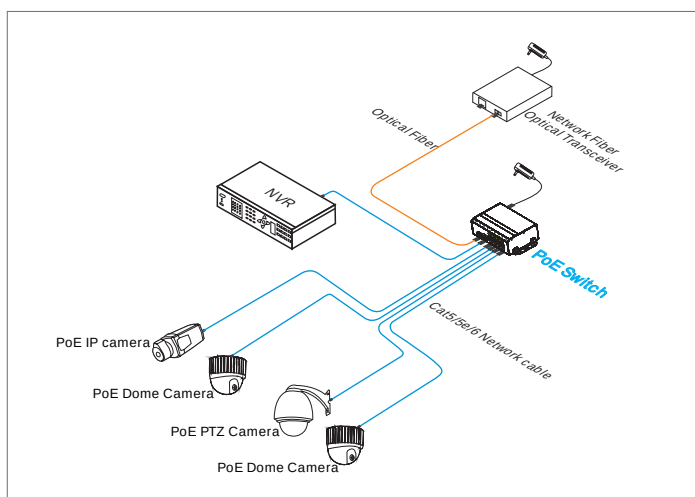
- Four 10/100Mbps PoE ports support IEEE802.3af/at standard
- Provide 2 uplink ports, 100Mbps optical port and ethernet port
- Every PoE ports and the switch have reset button to solve IP camera crash and other problem which is convenient for system maintenance
- Support IEEE802.3X full duplex flow control, support Auto MDI/MDIX
- Redundancy power design, power heat backup or raise power consumption
- Excellent circuit isolation protection, the lightning protection can up to 6KV

Technical Specifications

Model	HAP-SW04F
Power	
Power Supply	Power Adaptor 48VDC 1.25A
Voltage Range	48 ~ 57VDC
Consumption	<5W
Ethernet	
Ethernet Port	4 Ethernet Port:10/100Mbps, Uplink Port:10/100Mbps SFP Port:1000Mbps
Transmission Distance	Uplink Port:100m SFP Port : Depend on the optical module transmission performance
PoE Protocol	IEEE802.3af/at
PoE Power Supply	End span
PoE Power Consumption	Every PoE port output <30W (Default with 60W power adaptor, every port output <15W on the average, if need every port output 30W then need to purchase another 60W power adaptor)
Network Switch	
Ethernet Standard	IEEE802.3/802.3u/802.3x/802.3ab/802.3z
Switch Way	Store and forward
Package Data Cache	512k
MAC address list	2k
Protection	
Surge Protection	IEC61000-4-5 6KV
ESD	1a Contact Discharge Level 3, 1b Air Discharge Level 3, Per: IEC61000-4-2
Environmental	
Working Temperature	-40°C~75°C
Storage Temperature	-40°C~85°C
Humidity(Non-condensing)	0~95%
Mechanical	
Material	Aluminium
Color	Black
Weight	540g
Dimension	159mm x 110mm x 46.5 mm
Stability	
MTBF	≥30,000h

Specifications are subject to change without notice.

Configuration



HAP-SW08F

8 Port PoE Ethernet Switch



Key Features

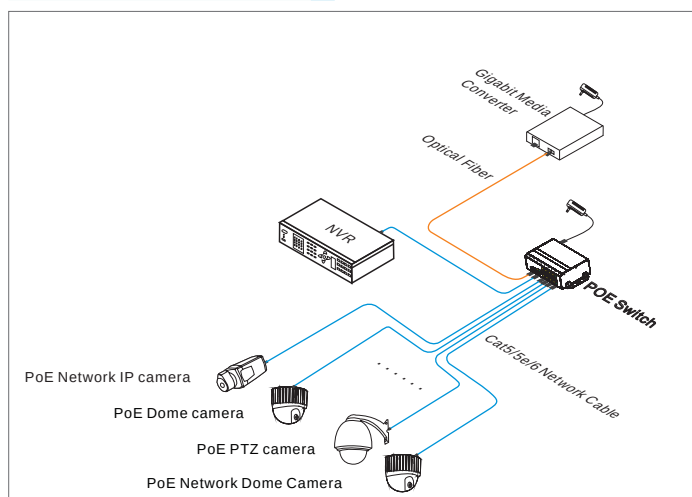
- Eight 10/100Mbps PoE ports support IEEE802.3af/at standard
- Provide 2 uplink ports, 1000Mbps optical port and ethernet port
- Every PoE ports and the switch have reset button to solve IP camera crash and other problem which is convenient for system maintenance
- Support IEEE802.3X full duplex flow control, support Auto MDI/MDIX
- 1M package data cache making more smooth of forwarding high-capacity data
- Redundancy power design, power heat backup or raise power consumption
- Excellent circuit isolation protection, the lightning protection can up to 6KV

Technical Specifications

Model	HAP-SW08F
Power	
Power Supply	Power Adaptor
Voltage Range	48~57VDC
Consumption	<5W
Ethernet	
Ethernet Port	8 Ethernet Port:10/100Mbps, Uplink Port:10/100Mbps SFP Port:1000Mbps
Transmission Distance	8 Ethernet port / Uplink Port:100m SFP Port:Depend on the optical module transmission performance
PoE Protocol	IEEE802.3af/at
PoE Power Supply	End span
PoE Power Consumption	af≤15W (every port), at≤30W(every port) (Default with 120W power adaptor, every port output <15W on the average, if need every port output 30W then need to purchase another 120W power adaptor)
Network Switch	
Ethernet Standard	IEEE802.3/802.3u/802.3x/802.3ab
Switch Way	Store and forward
Package Data Cache	1M
MAC address list	8k
Protection	
Surge Protection	4KV per:IEC61000-4-5
ESD	1a Contact Discharge Level 3, 1b Air Discharge Level 3, Per:IEC61000-4-2
Environmental	
Working Temperature	-40°C~75°C
Storage Temperature	-40°C~85°C
Humidity (Non-condensing)	0~95%
Mechanical	
Material	Aluminum
Color	Black
Weight	570g
Dimension	159mm x 110mm x 46.5 mm
Stability	
MTBF	≥30,000h

Specifications are subject to change without notice.

Configuration



HAP-SW24F

24 Port PoE Ethernet Switch with Optical Uplink



Key Features

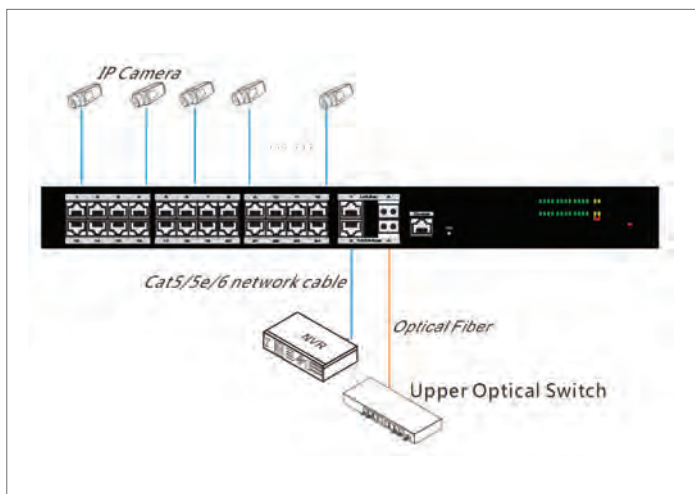
- 24 x 10/100Mbps PoE ports support IEEE802.3af/at standard
- Provide 4 uplink ports, 2 x 1000Mbps optical port and 2 x 1000Mbps ethernet port
- High-speed data forwarding, very suitable for surveillance large flow video data
- Support PoE power control software, convenient for testing & controlling PoE power output
- Support IEEE802.3X full duplex flow control, support Auto MDI/MDIX
- Provide real-time monitor the working status of every port via web control software
- Superior circuit protection, the lightning protection can up to 2KV

Technical Specifications

Model	HAP-SW24F
Power	
Power Supply	Electric Power Supply
Voltage Range	100~240 VAC
Consumption	430W (Maximum PoE output 380W)
Ethernet	
Ethernet Port	24 Ethernet Port : 10/100Mbps, Uplink Ethernet Port : 10/100Mbps SFP Port : 1000Mbps
Transmission Distance	24 Ethernet port / Uplink Port : 100m SFP Port : Depend on the optical module transmission performance
PoE Protocol	IEEE802.3af/at
PoE Power Supply	End span
PoE Power Consumption	every port < 30W, unit < 380W
Network Switch	
Ethernet Standard	IEEE802.3/802.3u/802.3z/802.3ab
Package Data Cache	9.6Mbps
Switch Capacity	12.8Gbps
Protection	
Surge Protection	Per : IEC61000-4-5 Level 3
ESD	1a Contact Discharge Level 3, 1b Air Discharge Level 3, Per : IEC61000-4-2
Environmental	
Working Temperature	0°C~55°C
Storage Temperature	-40°C~85°C
Humidity (Non-condensing)	0~95%
Mechanical	
Material	Iron
Color	Black
Weight	3.1kg
Dimension	442mm x 217mm x 44.5 mm
Stability	
MTBF	≥30,000h

Specifications are subject to change without notice.

Configuration



HUK5000N(P)

USB Keyboard Controller



Key Features

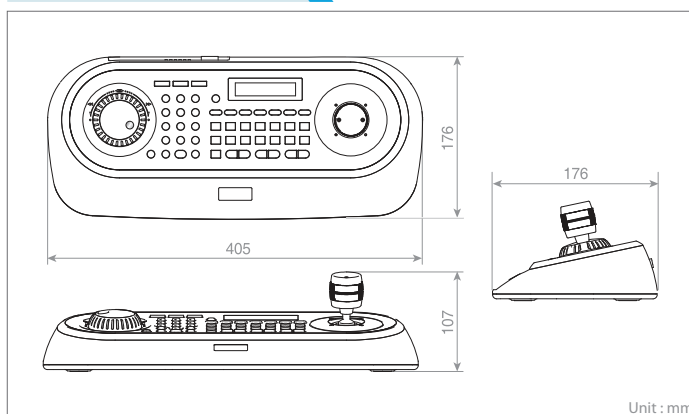
- USB Interface for Easy Plug and Play
- 3-Axis Joystick Control of PTZ Functions
- Multi-Function Keys and LCD Display
- Jog Dial for Smoother Control of DVR
- Recalls Up to 254 Cameras
- Excellent System Compatibility with Multiple Protocols
- Stylish Design

Technical Specifications

Model	HUK5000N(NTSC)	HUK5000P(PAL)
Communication		
Interface	RS-485/232/USB	
Data Port	Dome 1/2(Terminal Block), RS-232, Micro USB	
Baud Rate	2,400~38,400bps(USB Mode is Only 9,600bps)	
Control Unit	Up to 254 Dome Cameras Including Alarm Mode On Slave Keyboard(not supported in USB mode "ON")/DVR/Multiplexer	
Protocol	Pelco-P/D, Fil, File	
RS232	DVR/Upgrade	
USB	USB Interface Control	
Operational		
LCD Display	16x2 Line LCD	
Joystick	3 Axis Twist Zoom	
Jog Shuttle	DVR Playback Control	
On Screen Display	English	
Environmental		
Operating Temperature	0~50℃	
Operating Humidity	0~90%(Non-Condensing)	
Electrical		
Input Voltage/Current	12VDC	
Power Consumption	6W	
Mechanical		
Dimension(WxHxD)	405x176x107mm(15.9"x6.9"x4.2")	
Weight	1.2Kg	

Specifications are subject to change without notice.

Dimension



Unit : mm



Key Functions

- Quad and Full Screen Mode
- Automatic Screen Sequence
- Up to 60fps Real Time Display
- Dual Display Monitoring
- Compatible with any HDMI and USB Support Devices

HAQ-400

4CH HD Multi Switcher

Key Features

- 4CH HDMI Input
- 2CH HDMI Output
- Each Video Device Control by a USB Port
- Multi-split Video Mode Support
- IR Remote Controller Support
- 19" 1U Rack Mountable

Technical Specifications

Model	HAQ-400
VIDEO	
Video Input	4CH
Video Support Type	1.3, 1.4a, DVI 1.0
Input Video Format Type	RGB444, YUY444, YUV422
Display Output	2CH
Display Mode	Full, Quad, Sequence
Display Resolution	HDTV, 480p, 720p, 1080i, 1080p, VGA, SVGA, SXGA, UXGA, WUXGA
Sequence Dwell Time	4/8/10/15sec
EXTERNAL IN/OUT	
Video Input	4 HDMI
Display Out	2 HDMI
Control Input	4 USB
Control Output	1 USB
USB Connector Type	USB2.0 Type A-A / USB3.0 Type A-A
Power Input	DC Jack
Button	Channel, Quad, Sequence Selection Button
Remote Control	IR Remote Controller Support
ETC	
Operating Humidity	0~90% RH(Non-Condensing)
Operating Temperature	0~+40 °C
Power Supply	12VDC, 3A
Power Consumption	TBD
Dimension(WxHxD)	430(W)x45(H)x170(D)mm
Net Weight	Approx. 3.5g

Specifications are subject to change without notice.

HAP-EPCIPC2/EPCSV2

PoE Extender over Coaxial



Key Features

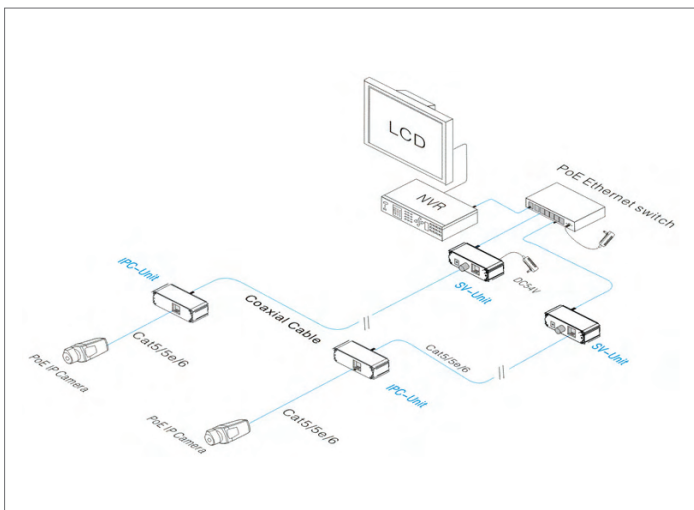
- Adopt advanced transmission and power supply technology, can transmit ethernet signal and power signal up to 500m over coaxial, 400m over UTP cable
- Ethernet delay less than 1ms ; meet point to point application
- Meet standard : IEEE802.3 10BASE-T, IEEE802.3u 100 BASE-TX, IEEE802.3af/at
- Excellent circuit isolation protection
- Superior product anti-thunder and anti-interference ability
- Solid and delicate, meet MIT rack installation standard

Technical Specifications

Model	HAP-ECIPC2 / HAP-ECSV2
Power	
Power Supply	PoE Power Supply or Power Adaptor
Voltage Range	DC48~57V
Power Consumption	<2W
Ethernet	
Ethernet Port	EPOC : 0~100Mbps Ethernet : 10/100Mbps Transmission Bandwidth Changes with Transmission Distance
Transmission Distance	Coaxial Cable : 0~500m Network Cable : 0~400m
Transmission Medium	RG59 Coaxial Cable and Cat5e/6
PoE Agreement	Support IEEE802.3af, IEEE802.3at
PoE Power Supply	Support End-span and Mid-span
Ethernet Standard	IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX/FX
Ethernet Delay	<1ms
Status	
LED Indicator	PoE In/Out Port : One indicates PoE power supply or DC power status(RJ45 Yellow), One indicates Ethernet signal transmission(RJ45 Green), Indicates signal transmission(RJ45 Yellow/Green)
Protection	
ESD	1a Contact Discharge Level 3 1b Air Discharge Level 3 Per : IEC61000-4-2
Communicating Port Anti-thunder Protection	Per : IEC61000-4-5 Level 3
Environmental	
Working Temperature	0°C~55°C
Storage Temperature	-40°C~85°C
Humidity (Non-condensing)	0~95%
Mechanical	
Material	Aluminum
Color	Black
Weight	IPC : 153g, SV : 154g
Dimension	63.2mm x 82mm x 25mm
Stability	
MTBF	>30,000h

Specifications are subject to change without notice.

Configuration



HAP-ECIPC2/ECSV2

Ethernet Extender over Coaxial



Key Features

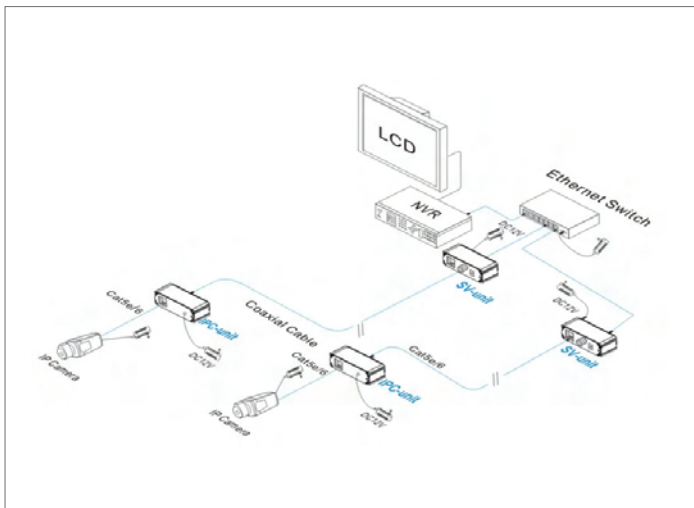
- Adopt advanced transmission technology to ethernet signal up to 1200m through coaxial cable and transmit ethernet signal up to 700m through network cable
- Ethernet delay less than 1ms ; meet point to point application
- Meet standard : IEEE802.3 10BASE-T, IEEE802.3u 100 BASE-TX
- Excellent circuit isolation protection
- Superior product anti-thunder and anti-interference ability
- Solid and delicate, meet MIT rack installation standard
- Durable and delicate, meet MIT rack installation standard

Technical Specifications

Model	HAP-ECIPC2 / HAP-ECSV2
Power	
Power Supply	Power Adaptor
Voltage Range	DC12V
Power Consumption	<2W
Ethernet	
Ethernet Port	0~100Mbps Ethernet Port : 10/100Mbps Transmission Bandwidth Changes Based on Transmission Distance
Transmission Distance	Coaxial Cable : 0~1200m Network Cable : 0~700m
Transmission Medium	RG59 Coaxial Cable and Cat5e/6
Ethernet Standard	IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX/FX
Ethernet Delay	<1ms
Status	
LED Indicator	In/Out Port : Power Status(RJ45 Yellow), Network Signal Transmission(RJ45 Green), Indicate Cable Connection(RJ45 Yellow/Green)
Protection	
ESD	1a Contact Discharge Level 3 1b Air Discharge Level 3 Per : IEC61000-4-2
Communicating Port Anti-thunder Protection	Level 3, Per : IEC61000-4-5
Environmental	
Working Temperature	0°C~55°C
Storage Temperature	-40°C~85°C
Humidity (Non-condensing)	0~95%
Mechanical	
Material	Aluminum
Color	Black
Weight	IPC : 134g, SV : 134g
Dimension	63.2mm x 82mm x 25mm

Specifications are subject to change without notice.

Configuration



ZOOM LENS

Long Range Surveillance Motorized Zoom Lens

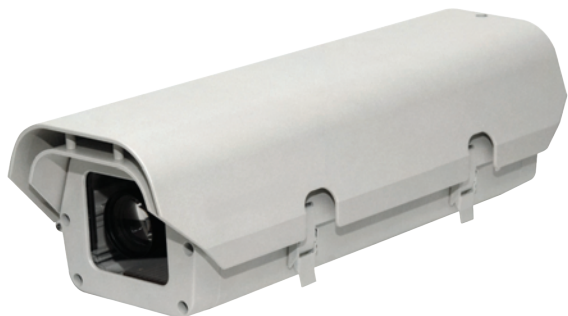
Key Features

- Ultra compact & light weight long range surveillance
- Designed as infra-red corrected lens from visible to near infrared region optically (Re-focusing of the camera is not needed in day and night for 24/7 surveillance)
- Suitable for various surveillance - Border, Harbor, Airport, etc. 24/7 long distance observation

Image							
Model	RHM-60Z1245GP-EXIR	RHM60Z1245GP-EXFIR	RHM60Z1245G-IR	RHM60Z1245GP-IR	RHM60Z1245GP-FIR	RHM40Z1045G-IR	RHM40Z1045GP-IR
Zoom Ratio	60	60	60	60	60	40	40
Focal Length (mm)	12.5 - 750 [25 - 1500]	12.5 - 750 [25 - 1500]	12.5 - 750	12.5 - 750	12.5 - 750	10 - 400	10 - 400
Iris	DC	DC	DC	DC	DC	DC	DC
F-no. (Wide)	4.5 [9.0]	4.5 [9.0]	4.5	4.5	4.5	4.5	4.5
Optical Near IR Correct	○	○	○	○	○	○	○
Preset Focus Zoom	○	○	-	○	○	-	○
2x Remote Extender	○	○	-	-	-	-	-
De-fog Filter	-	○	-	-	○	-	-
Optical Axis Adjust	○	○	○	○	○	-	-
Weight Approx.(kg)	3.2	3.2	2.9	3.1	3.1	0.8	0.8
Dimension (WxHxD)mm	114x100.5x294	114x100.5x294	114x100.5x294	114x100.5x294	114x100.5x294	65x75.3x157.7	65x75.3x157.7
Mount	C	C	C	C	C	C	C
Sensor format (inch)	1/1.8, 1/2, 1/3	1/1.8, 1/2, 1/3	1/1.8, 1/2, 1/3	1/1.8, 1/2, 1/3	1/1.8, 1/2, 1/3	1/2, 1/3	1/2, 1/3
Mega-pixel	○	○	○	○	○	○	○
Day & Night	○	○	○	○	○	○	○

HCH808

Weatherproof Housing



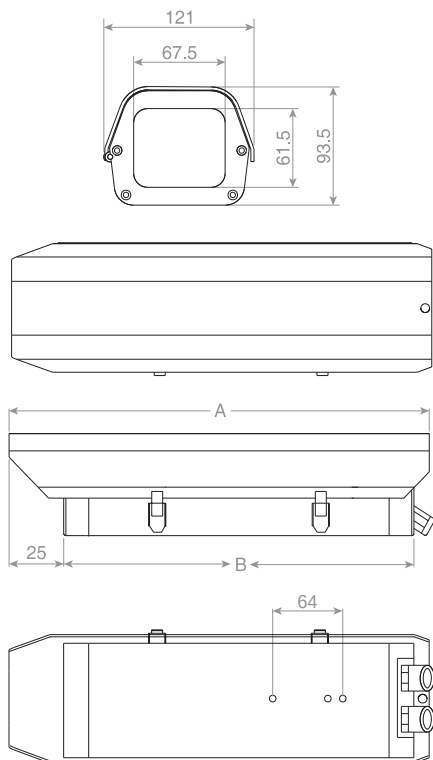
Key Features

- Indoor/Outdoor Installaion
- All Aluminum Construction
- Side Opening for Easy Access
- IP66 Protection Grade
- Optional Heater & Blower kit

Series Model

- HCH808M-Basic
- HCH808M-2HBS-24VAC Input Heater, Blower & Sun-Shield
- HCH808L-2HBS-24VAC Input, Heater, Blower & Sun-Shield
- HCH808L-3HBS-230VAC Input, Heater, Blower & Sun-Shield

Dimension



MODEL	A	B
HCH808M series	360	320
HCH808L series	440	400

Unit : mm

HDH304

Speed Dome Camera Housing



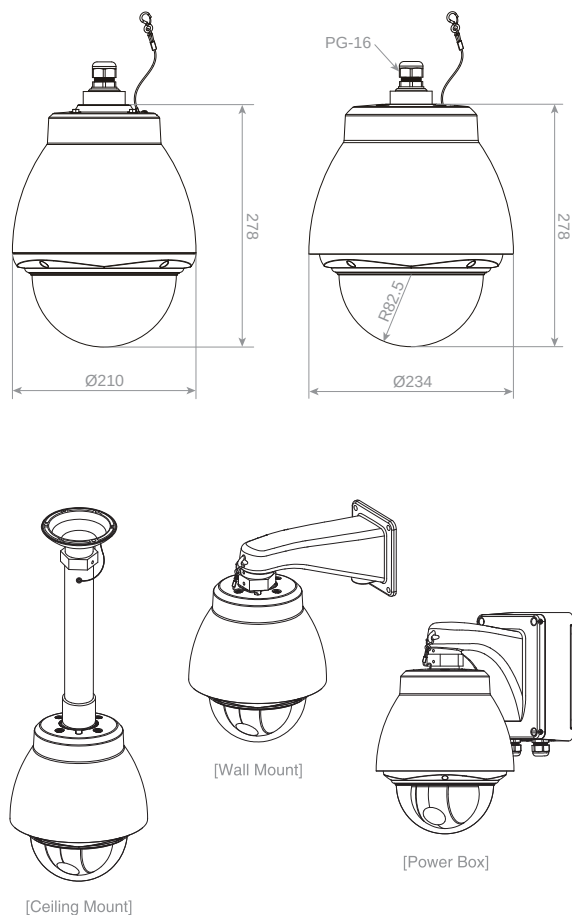
Key Features

- Indoor/Outdoor Installaion
- IP66 Protection Grade
- Wall or Ceiling Application
- Built-in Heater&Blower kit

Series Model

- HDH304-OC : Clear bubble, with Sun-shield
- HDH304-OS : Smoke bubble, with Sun-shield
- HDH304-IC : Clear bubble, without Sun-shield
- HDH304-IS : Smoke bubble, without Sun-shield

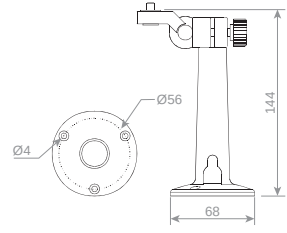
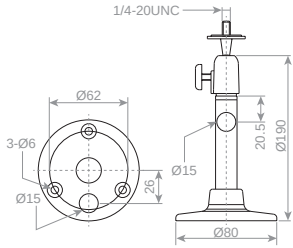
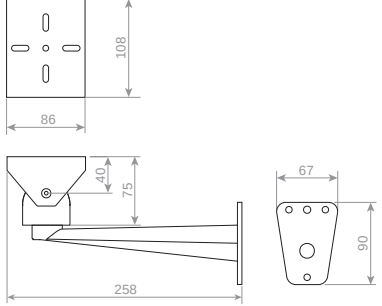
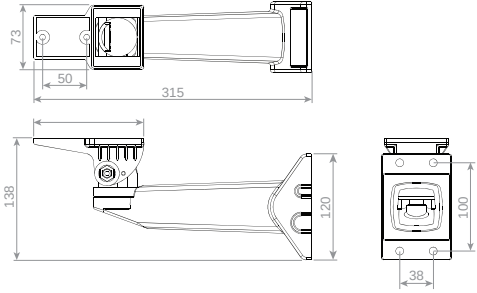
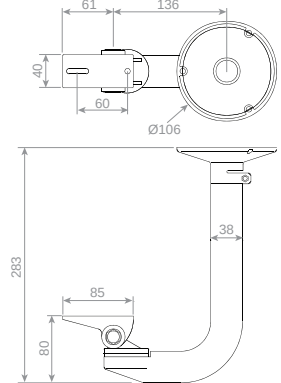
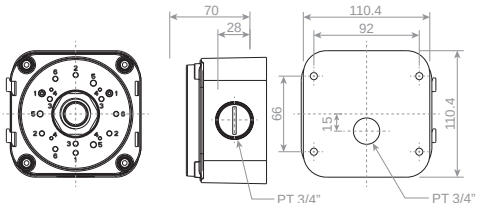
Dimension



Unit : mm

CAMERA ACCESSORIES

Box, Bullet Camera Accessories

TYPE	MODEL	SPEC	DIMENSION(mm)
Box Camera Mount	HCS805E	144mm Long Plastic Max. Load 3.5kg	
Box Camera Mount	HCS811S	190mm Long Die Casting Aluminum Max. Load 4.5kg	
Housing Wall Mount	HCS161	Die Casting Aluminum Max. Load 9kg	
Housing Wall Mount	HCS170	Die Casting Aluminum Max. Load 9kg	
Housing Ceiling Mount	HCS171	Die Casting Aluminum Max. Load 9kg	
Junction Box	HJB200	Die Casting Aluminum IP66 Inlet Dimension PT 3/4"	

CAMERA ACCESSORIES

Dome Camera Accessories

TYPE	MODEL	SPEC	DIMENSION(mm)
Flush Mount Hardware	HCS300	Steel and Plastic Max. Load 2.5kg	
Junction Box	HDA501	Die Casting Aluminum Inlet Dimension PT 3/4"	
Wall Mount	HDB243	Die Casting Aluminum Max. Load 5kg Inlet Dimension PT 3/4"	
Junction Plate	HCM155	Steel Sheet Junction Plate between HDB243 & HCM150/151	
Wall Mount	HDB344	Polycarbonate Max. Load 2kg	

CAMERA ACCESSORIES

Dome Camera Accessories

TYPE	MODEL	SPEC	DIMENSION(mm)
Wall & Ceiling Mount	HVPCB2/HVPWB2	Die Casting Aluminum 1" PT Tap Pipe Max. Load 5kg	

PTZ & ETC Accessories

TYPE	MODEL	SPEC	DIMENSION(mm)
Wall Mount	HDB242E	Die Casting Aluminum Max. Load 9kg Inlet Dimension PT 3/4" Camera Mount PF 1-1/2"	
Ceiling Mount	HDB241	Die Casting Aluminum Max. Load 9kg 1 1/2" PT Tap Pipe	
Flush Mount Hardware	HCS251	Steel and Plastic Max. Load 2kg	

TYPE	MODEL	SPEC	DIMENSION(mm)
Flush Mount Hardware	HCS251-HV 	Steel and Plastic Max. Load 2kg Horizontal View Tint Bubble	
Corner Mount	HCM150 	Die Casting Aluminum Max. Load 25kg	
Pole Mount	HCM151 	Die Casting Aluminum Max. Load 25kg	
Corner & Pole Mount	HCPM230W 	Die Casting Aluminum Max. Load 25kg	
Roof and Parapet Mount	HCM201 	Aluminum Construction 1-1/2" Pipe Max. Load 18kg	

Accessory Configuration Tree

Box Camera



Plastic Dome Camera

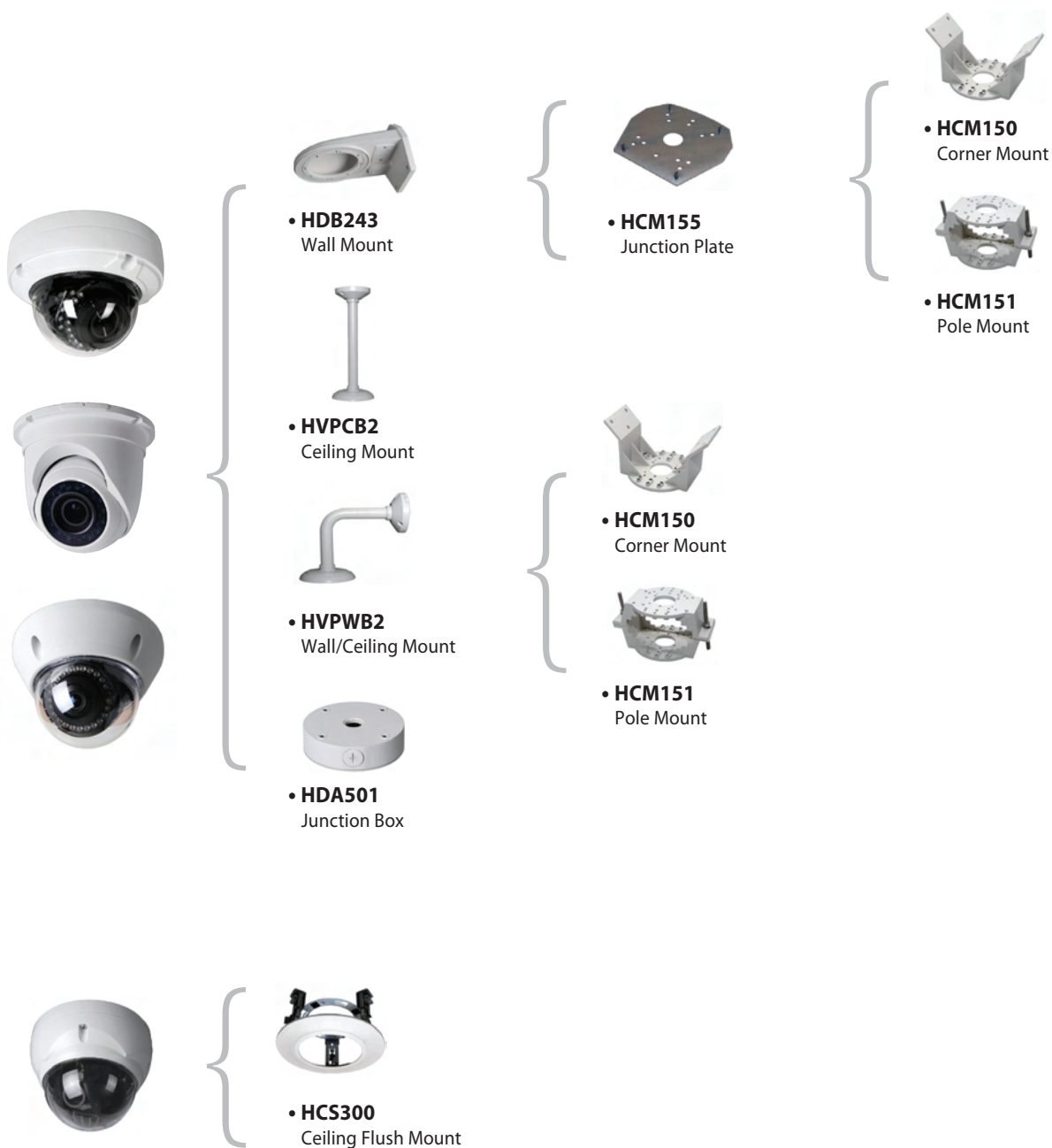


Bullet Camera



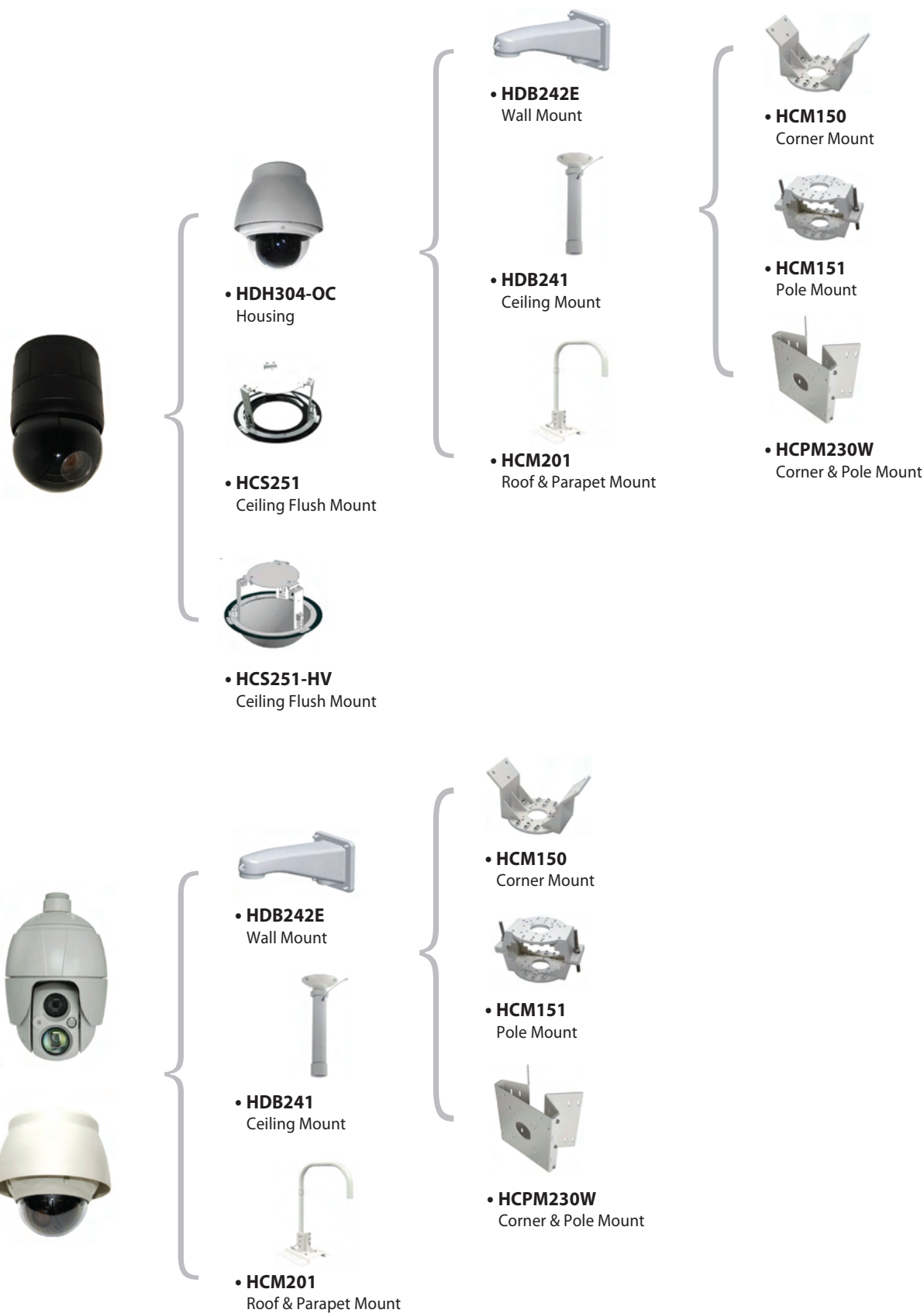
Accessory Configuration Tree

Vandal Dome Camera



Accessory Configuration Tree

PTZ Camera



Accessory Configuration Tree

PTZ Camera



• **HDB243**
Wall Mount



• **HVPCB2**
Ceiling Mount



• **HVPWB2**
Wall/Ceiling Mount



• **HDA301**
Adaptor



• **HCS300**
Ceiling Flush Mount



• **HCM155**
Junction Plate



• **HCM150**
Corner Mount



• **HCM151**
Pole Mount



• **HCM150**
Corner Mount



• **HCM151**
Pole Mount

Hitron Total Security Solution

