

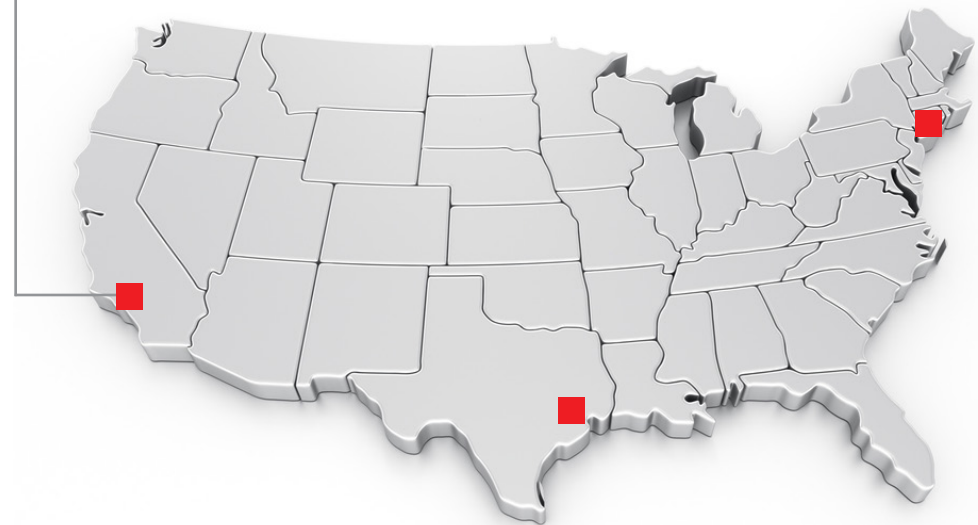
2018

Full Product Catalog



All Star Partner Program.....	3
Three Tiers of Dahua Products.....	4
Core Technology.....	5
Enhanced Power over Ethernet Technology.....	6
Intelligent Video System (IVS).....	7
IP CAMERAS	
Box Cameras.....	8
Bullet Cameras.....	8-12
Dome Cameras.....	12-14
Dome WiFi Cameras.....	15-16
Eyeball Cameras.....	16-17
Fisheye Cameras.....	18
Multi-sensor Cameras.....	19
PTZ Network Cameras.....	19-22
NETWORK VIDEO RECORDERS.....	23-25
HDCVI CAMERAS	
Fixed IR HDCVI Cameras.....	26-29
Eyeball HDCVI Cameras.....	29-30
PIR Camera.....	30
Fixed Mini-Bullet Cameras.....	30
HDCVI Fisheye Cameras.....	31
Multi-Sensor HDCVI Cameras.....	31
HDCVI PTZ Cameras.....	31-33
HDCVI DVRs.....	34-35

Dahua Technology USA brings high-value, total security solutions to the North American market by focusing on leading technology and world class support. We're working hard to make Dahua the first name that comes to mind when you think of innovative video surveillance solutions



Authorized Distributors

To protect our customers' rights and interests, Dahua Technology USA only sells products through authorized distributors and not via e-commerce platforms. Dahua's official website in North America is www.dahuasecurity.com. Any products purchased through unauthorized channels will not be eligible for Dahua's warranty and technical support. To verify whether a distributor is authorized please or if you are interested in becoming an authorized distributor or partner, please email sales.usa@global.dahuatech.com or call 949-679-7777.

ALL STAR PARTNER PROGRAM

Dahua is committed to providing our partners with comprehensive resources that will help them gain a competitive advantage and win more business. The three different All-Star tiers provide an array of opportunities and support.

Contact us now to learn more: dealers.usa@global.dahuatech.com.



5-Year Warranty



Project Registration



Lead Generation



Partner Care Program



Technical Consultant



Advanced Replacement



Future-Proof Credit



Online Training



Partner Summit



	Up to 44% Off MSRP	Up to 48% off MSRP	Up to 52% off MSRP
On-Board Package	✓	✓	✓
5-Year Warranty	✓	✓	✓
Adv. Replacement thru Distributor	✓	✓	✓
Project Registration	✓	✓	✓
Demo Purchase Program	✓	✓	✓
Co-Marketing	✓	✓	✓
Online Training	✓	✓	✓
Partner Training	✓	✓	✓
Partner Certification Coming Soon	-	✓	✓
Tech Support	General Line	General Line	Priority Line
Partner Care Program	-	✓	✓
Lead Generation	-	✓	✓
Star Reward Points Coming Soon	-	✓	✓
Future-Proof Credit	-	Starting at \$50K	Starting at \$50K
Technical Consultant	-	-	✓
All-Star Partner Summit	-	-	Eligible

There's a Dahua product for every solution! Dahua offers three series of products to suit simple through advanced applications. From basic products to the latest in cutting-edge video surveillance technology, Dahua provides feature-rich, reliable cameras, recorders, and accessories at a competitive price. The three tiers of offerings range from good, economical products to competitively priced, feature-rich products.



- Advanced security applications for medium and large businesses
- Ultra high resolution (up to 12MP)
- Smart H.265+, built-in Intelligent Video System (IVS) analytics
- IP Pan Tilt Zoom (PTZ) cameras feature a long-range optical zoom and Smart IR illumination over 650 feet
- Storage devices typically feature 32-, 64-, 128- or 256-channel RAID options with 4K recording



- Small-to-mid-size applications
- Built-in IVS analytics, IVS provides the ability to detect and analyze moving objects
- True Wide Dynamic Range (up to 120dB)
- Most IP and HDCVI PTZ cameras feature a short-long range optical zoom
- Storage devices typically feature 8-, 16-, or 32-channel options with 4K recording

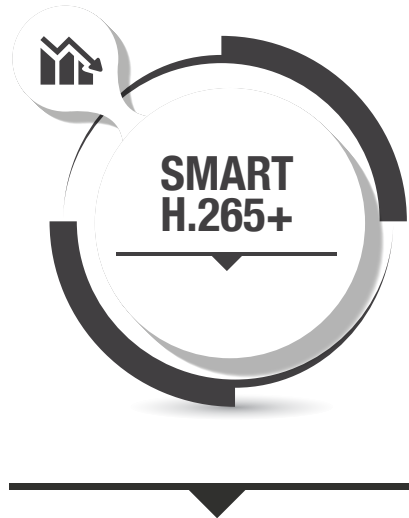


- Small-to-mid-size applications
- Ideal for users with basic surveillance needs and uncomplicated scenes
- Digital Wide Dynamic Range (DWDR)
- IP and HDCVI PTZ camera options offer a short- or mid-range optical zoom
- Storage devices typically feature 4-, 8-, or 16-channel options

Dahua leads not only as a manufacturer but as an innovator. Dahua pioneered HDCVI technology, which produces high-definition images over coax cable. HDCVI has been an industry game-changer, resulting in more than 100 global partners. Dahua also engineered the Smart H.265+ codec, an optimized version of H.265. Smart H.265+ improves bandwidth and storage capabilities up to 80% over standard H.264.



HDCVI 3.0, the latest release, includes intelligent features and up to 4K resolution, further extending the life of legacy systems and security investments. HDCVI is an open platform standard developed by Dahua Technology. It allows for up to 4K UHD resolution over coaxial cable, extending the life of legacy infrastructure.



Dahua's line of Smart H.265+ cameras offer backwards compatibility with H.264 and H.265, allowing greater flexibility to configure different encoding options in a video surveillance system. Pair with a Dahua recorder for a full solution that is cost-effective and doesn't put strain on the network.



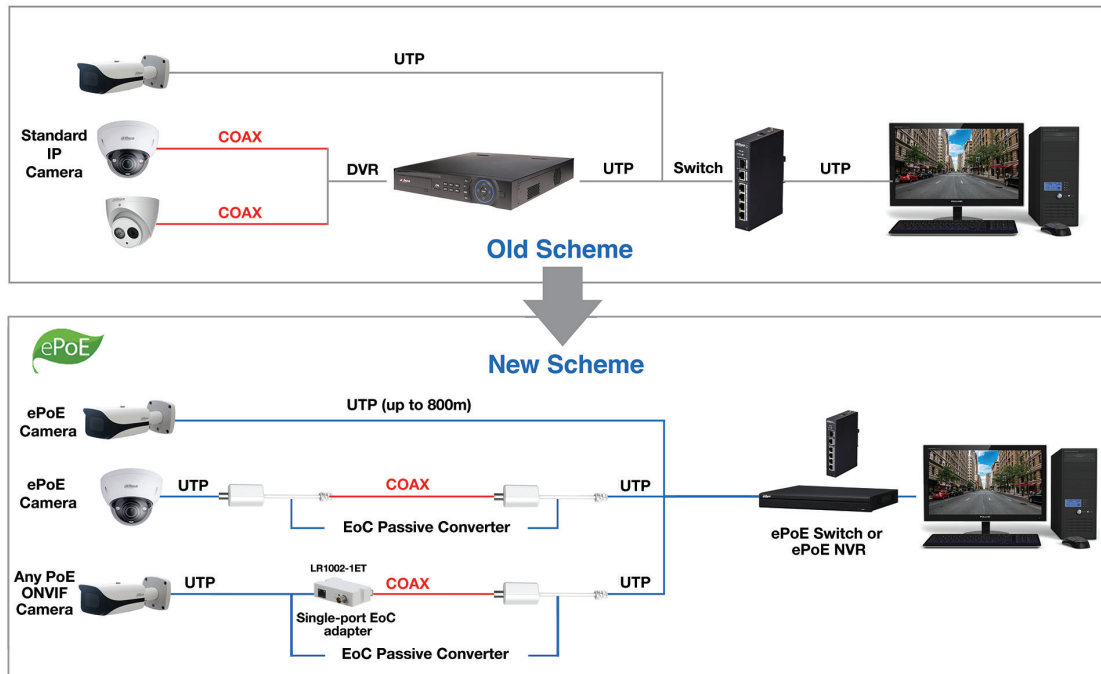
Dahua offers 3 levels of Starlight Technology in the good, better, best categories for low-light applications. The 5MP Pro Series cameras (*N51 and N52*), are a cost effective, basic version of Starlight that provides good images in low-light environments. Dahua's 2MP cameras offer enhanced Starlight Technology for professional applications that require better visibility under dark conditions. Starlight+ 4K cameras provides excellent images in ultra-low conditions where color details are maintained longer.



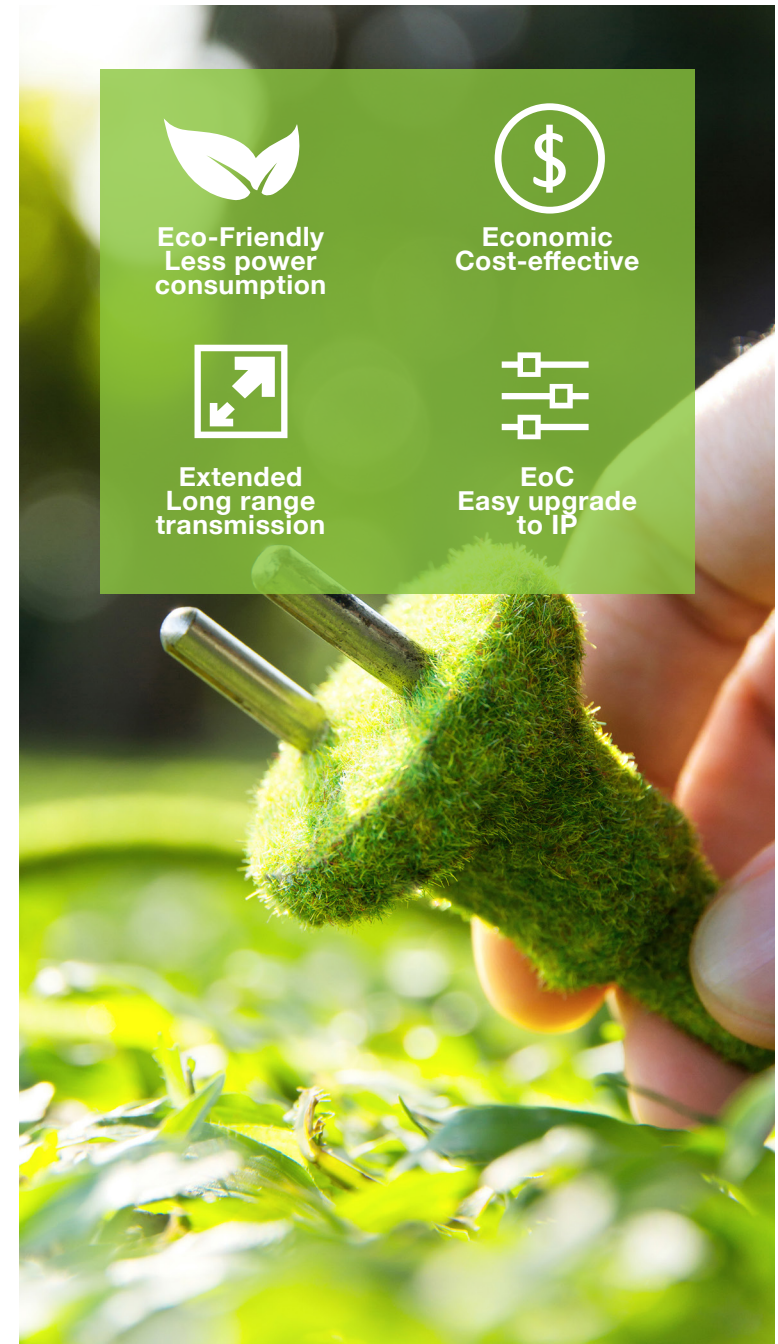
ePoE technology offers a plug-and-play solution to transmit power and data over long distances via Ethernet or coaxial cables. ePoE technology is a viable, cost-effective solution for extending transmission distances and for converting existing, coax-based analog systems into IP systems.

Enhanced Power over Ethernet (ePoE) Technology

Dahua's innovative ePoE technology offers a plug-and-play solution to transmit power and data over long distances via Ethernet or coaxial cables, reducing installation time and saving money. ePoE technology is a viable, cost-effective solution for extending transmission distances and for converting existing, coax-based analog systems into IP systems.



Enhanced PoE encompasses pure IP systems where a single CAT 5 cable can carry signals up to 800 m (2624 ft), and IP/Analog hybrid systems where the technology leverages existing analog infrastructure to transmit power and data up to 1000 m (3281 ft) over RG59 coaxial cable. Enhanced PoE is compatible with three connection modes operating over the same network simultaneously: traditional IP networks, long-distance ePoE networks and coaxial networks. ePoE technology seamlessly integrates the latest high-definition IP cameras with a coaxial infrastructure using the Ethernet over Coaxial (EoC) protocol to convert between analog and IP power and data transmissions.



Eco-Friendly
Less power consumption

Economic
Cost-effective

Extended
Long range transmission

EoC
Easy upgrade to IP

Intelligent Video System (IVS) is an intelligent solution that helps minimize an operator's time searching for data, increases effectiveness, and reduces response time. IVS works by using metadata via the smart search so that evidence can instantly be retrieved for all objects that entered or exited the scene. As a result, IVS saves operators time when searching for an event due to less recorded video to sort through. Thanks to the high level accuracy from IVS rules, fewer false positives trigger data recordings for a higher savings on storage.

STANDARD

Notification of:

- Tampering
- Error writing to an onboard Micro SD card.
- Error sending/receiving data over the network.
- Unauthorized access

PREMIUM

Detection of:







- Motion
- Tripwire
- Intrusion
- Abandoned/Missing Object
- Scene Change

ADVANCED

Detection of:

- Facial Detection
- Heat Mapping
- Auto-tracking
- People Counting
- E-PTZ



Model	Box Cameras			Bullet Cameras		
	NK8BA4  UltraSeries	N45BA5  ProSeries	N25BA5  ProSeries STARLIGHT	NK8BB7Z  UltraSeries IP67 IK10 4K	N84BB14  UltraSeries IP67 IK10	N65CB5Z  ProSeries IP67 IK10 PoE
Image Sensor	1/1.7" 12MP CMOS	1/3" 4MP CMOS	1/2.8" 2MP CMOS	1/1.7" 12MP CMOS	1/2.5" UHD 4K (8MP) CMOS	1/2.9" 6MP CMOS
Lens	Sold Separately	Sold Separately	Sold Separately	4.1mm - 16.4mm/F1.53 Motorized	4mm/F1.6 Manual	2.7mm - 13.5mm, Motorized
Horizontal Field of View	N/A	N/A	N/A	85° - 35°	87°	91° - 27°
Minimum Illumination	Color: 0.01 lux/F1.2 B/W: 0.001 lux/F1.2	Color: 0.01 lux/F1.2 B/W: 0.001 lux/F1.2	Starlight Color: 0.005 lux/F1.2 B/W: 0.001 lux/F1.2	Color: 0.02 lux/F1.53 0 lux/F1.53 (IR on)	Color: 0.05 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.04 lux/F1.4 0 lux/F1.4 (IR on)
Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night
Wide Dynamic Range (WDR)	DWDR	120dB	120dB	DWDR	DWDR	True WDR (120dB)
Maximum IR Distance	N/A	N/A	N/A	164ft (50m)	130ft (40m)	164ft (50m)
Video Compression	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG
Maximum Resolution	12MP (4000 x 3000)	4MP (2688x1520)	1080p (1920x1080)	12MP (4000 x 3000)	4K (8MP) (3840x2160)	6MP (3072 x 2048)
Frame Rate	20fps@12MP	30fps@4MP	60fps@1080p	20fps@12MP	15fps@4K 30fps@3MP	20fps@6MP
Multi-streaming	3 streams	3 streams	3 streams	3 streams	3 streams	3 streams
Intelligent Video	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, People Counting, Heat Map	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, People Counting, Heat Map	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection
Compatibility	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI
Audio In/Out	1/1, Built-in Mic	1/1, Built-in Mic	1/1, Built-in Mic	1/1	—	1/1
Memory Slot	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB
Alarm In/Out	2/1	2/1	2/1	2/1	—	2/1
Environmental Protection	—	—	—	IP67, IK10	IP67	IP67, IK10
Working Temperature	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-40°F to 140°F (-40°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)
Power	DC12V/AC24V, PoE (802.3af), Max <8W	DC12V/AC24V, PoE (802.3af), Max <5W	DC12V/AC24V, PoE (802.3af), Max <5W	DC12 V, PoE+ (802.3af) Max < 13 W	DC12V, PoE (802.3af) Max < 7W	DC12V, PoE (802.3af Class 0) Max < 12.95 W

Model	Bullet Cameras					
	N64CB32  IP67 ProSeries ePoE	N64CB33  IP67 ProSeries ePoE	N52BF3Z  IP67 ProSeries STARLIGHT	N51BD22  IP67 ProSeries STARLIGHT	N51BD23  IP67 ProSeries STARLIGHT	N45BB5Z  IP67 ProSeries
Image Sensor	1/2.9" 6MP STARVIS™ CMOS	1/2.9" 6MP STARVIS™ CMOS	1/2.7" 5MP CMOS	1/2.7" 5MP CMOS	1/2.7" 5MP CMOS	1/3" 4MP CMOS
Lens	2.8mm/F1.6	3.6mm/F1.6	2.7mm - 13.5mm, Motorized	2.8mm/F1.6, Manual	3.6mm/F1.6, Manual	2.7mm - 12mm/F1.4 Motorized
Horizontal Field of View	98°	69°	95° - 27°	96°	96°	100° - 35°
Minimum Illumination	Color: 0.04 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.04 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.008 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.009 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.009 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.03 lux/F1.4 0 lux/F1.4 (IR on)
Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night
Wide Dynamic Range (WDR)	True WDR (120dB)	True WDR (120dB)	True WDR (120dB)	True WDR (120dB)	True WDR (120dB)	120dB
Maximum IR Distance	131ft (40m)	131ft (40m)	197ft (60m)	98ft (30m)	98ft (30m)	164ft (50m)
Video Compression	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG
Maximum Resolution	6MP (3072 x 2048)	6MP (3072 x 2048)	5MP (2592 x 1944)	5MP (2592 x 1944)	5MP (2592 x 1944)	4MP (2688x1520)
Frame Rate	20fps@6MP	20fps@6MP	20fps@5MP	20fps@5MP	20fps@5MP	30fps@4MP
Multi-streaming	3 streams	3 streams	2 streams	2 streams	2 streams	3 streams
Intelligent Video	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Tripwire, Intrusion	Tripwire, Intrusion	Tripwire, Intrusion	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection
Compatibility	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI
Audio In/Out	-	-	-	-	-	1/1
Memory Slot	Micro SD, Max 128GB	Micro SD, Max 128GB	-	-	-	Micro SD, Max 128GB
Alarm In/Out	-	-	-	-	-	2/1
Environmental Protection	IP67	IP67	IP67	IP67	IP67	IP67
Working Temperature	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)
Power	DC12V, PoE (802.3af Class 0), < 5.2 W	DC12V, PoE (802.3af Class 0), < 7 W	DC12V, PoE (802.3af Class 0) Max < 12.6 W	DC12V, PoE (802.3af Class 0) Max < 4.85 W	DC12V, PoE (802.3af Class 0) Max < 4.85 W	DC12V (±25%), PoE (802.3af) Max <11.5W

Model	Bullet Cameras					
	N42AC3Z  IP67 LiteSeries	NEW N28BB7Z  IP67 IK10 UltraSeries	N25BB5Z  IP67 ProSeries	N24BB33  IP67 ProSeries	DH-IPC-HFW23A0RN-ZS  IP67 LiteSeries	N44BB33  IP67 ProSeries
Image Sensor	1/3" 4MP CMOS	1/1.9" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/3" 3MP CMOS	1/3" 4MP CMOS
Lens	2.7mm - 12mm/F1.4 Motorized	4.1mm - 16.4mm, Motorized	2.7mm - 12mm/F1.4, Motorized	3.6mm/F2.0, Manual	2.7mm -12mm/F1.4, Motorized	3.6mm/F2.0 Manual
Horizontal Field of View	100° - 35°	80° - 32°	97° - 34°	87°	92° - 28°	87°
Minimum Illumination	Color: 0.1 lux/F1.4 0 lux/F1.4 (IR on)	Color: 0.002 lux/F1.53 0 lux/F1.53 (IR on)	Color: 0.006 lux/F1.4 0 lux/F1.4 (IR on)	Color: 0.009 lux/F2.0 0 lux/F2.0 (IR on)	Color: 0.1 lux/F1.4 0 lux/F1.4 (IR on)	Color: 0.08 lux/F2.0 0 lux/F2.0 (IR on)
Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night
Wide Dynamic Range (WDR)	120dB	True WDR (120dB)	120dB	120dB	DWDR	120dB
Maximum IR Distance	197ft (60m)	164ft (50m)	164ft (50m)	130ft (40m)	98ft (30m)	130ft (40m)
Video Compression	Smart H.264+, H.264, MJPEG	H.265/H.264	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG
Maximum Resolution	4MP (2688 x 1520)	1080p (1920 x 1080p)	1080p (1920x1080)	1080p (1920x1080)	3MP (2048x1536)	4MP (2688x1520)
Frame Rate	20fps@4MP 30fps@3MP	60fps@1080p	60fps@1080p	60fps@1080p	20fps@3MP 30fps@1080p	30fps@4MP
Multi-streaming	2 streams	3 streams	3 streams	3 streams	2 streams	3 streams
Intelligent Video	—	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, People Counting, Heat Map	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	—	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection
Compatibility	—	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI
Audio In/Out	ONVIF, PSIA, CGI	1/1	1/1	—	—	—
Memory Slot	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB
Alarm In/Out	—	2/1	2/1	—	—	—
Environmental Protection	IP67	IP67, IK10	IP67	IP67	IP67	IP67
Working Temperature	-22°F to 140°F (-30°C to 60°C)	-40°F to 140°F (-40°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)
Power	DC12V (±25%), PoE (802.3af) Max 12.95W	DC12V, PoE+ (802.3at Class 4) < 13 W	DC12V (±25%), PoE (802.3af), Max <11.5W	DC12V (±25%), PoE (802.3af), Max <6W	DC12V (±25%), PoE (802.3af), Max 7.5W	DC12V (±25%), PoE (802.3af), Max <6W

Model	Bullet Cameras					
	N44BB33-B  IP67 ProSeries	DH-IPC-HW83A1EN-Z  IP67 UltraSeries STARLIGHT	DH-IPC-HFW82A1EN-Z  IP67 UltraSeries STARLIGHT	DH-IPC-HFW13A0SN  IP67 LiteSeries	DH-IPC-HFW11A0SN  IP67 LiteSeries	DH-IPC-HFW13A0SN-W  IP67 LiteSeries
Image Sensor	1/3" 4MP CMOS	1/2.8" 3MP CMOS	1/2.8" 2MP CMOS	1/3" 3MP CMOS		1/3" 3MP CMOS
Lens	3.6mm/F2.0 Manual	2.7mm - 12mm/F1.4, Motorized	2.7mm - 12mm/F1.4, Motorized	2.8mm/F2.0	3.6mm/F2.0	2.8mm/F2.0 3.6mm/F2.0
Horizontal Field of View	87°	94° - 33°	99° - 35°	92°	81°	100° 77°
Minimum Illumination	Color: 0.08 lux/F2.0 0 lux/F2.0 (IR on)	Color: 0.005lux/F1.4 0 lux/F1.4 (IR on)	Color: 0.005lux/F1.4 0 lux/F1.4 (IR on)	Color: 0.01 lux/F2.0 0 lux/F2.0 (IR on)		Color: 0.01 lux/F2.0 0 lux/F2.0 (IR on)
Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night		True Day/Night
Wide Dynamic Range (WDR)	120dB	140dB	140dB	DWDR		DWDR
Maximum IR Distance	130ft (40m)	164ft (50m)	164ft (50m)	98ft (30m)		98ft (30m)
Video Compression	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.264, MJPEG		H.264, MJPEG
Maximum Resolution	4MP (2688x1520)	3MP (2048x1536)	1080p (1920x1080)	3MP (2048x1536)		1.3MP (1280x960) 3MP (2304x1296)
Frame Rate	30fps@4MP	30fps@3MP	30fps@1080p	20fps@3MP 30fps@1080p		30fps@1.3MP 20fps@3MP 30fps@1080p
Multi-streaming	3 streams	3 streams	3 streams	2 streams		2 streams
Intelligent Video	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, People Counting, Heat Map	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, People Counting, Heat Map	-		-
Compatibility	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, CGI		ONVIF, CGI, WiFi (IEEE802.11b/g/n) 50m (open field)
Audio In/Out	-	1/1	1/1	-		-
Memory Slot	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	-		Micro SD, Max 128GB
Alarm In/Out	-	2/1	2/1	-		-
Environmental Protection	IP67	IP67	IP67	IP67		IP67
Working Temperature	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)		-22°F to 140°F (-30°C to 60°C)
Power	DC12V (±25%), PoE (802.3af), Max <6W	DC12V (±25%), PoE (802.3af), Max 11W	DC12V (±25%), PoE (802.3af), Max 11W	DC12V (±25%), PoE (802.3af), Max 5W		DC12V (±25%), PoE (802.3af), Max 5W DC12V, IR On Max 5.5W (IR On)



Model	Bullet Camera		Dome Cameras				
	DH-IPC-HFW11A0SN-W		NK8BL7Z	N84BL44	N68BL7Z	N65CL5Z	N64CL52
Image Sensor	1/3" 1.3MP CMOS		1/1.7" 12MP CMOS	1/2.5" UHD 4K (8MP) CMOS	1/1.8" 6MP CMOS	1/2.9" 6MP CMOS	1/2.9" 6MP STARVIS™ CMOS
Lens	2.8mm/F2.0	3.6mm/F2.0	4.1mm - 16.4mm, Motorized	4mm/F1.6, Manual	4.1mm - 16.4mm/F1.53, Motorized	2.7mm - 13.5mm, Motorized	2.8mm/F1.6
Horizontal Field of View	92°	72°	105° - 35°	87°	106°	91° - 27°	98°
Minimum Illumination	Color: 0.01 lux/F2.0 0 lux/F2.0 (IR on)		Color: 0.02 lux/F1.53 0 lux/F1.53 (IR on)	Color: 0.05 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.02 lux/F1.53 0 lux/F1.53 (IR on)	Color: 0.04 lux/F1.4 0 lux/F1.4 (IR on)	Color: 0.04 lux/F1.6 0 lux/F1.6 (IR on)
Day/Night	True Day/Night		True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night
Wide Dynamic Range (WDR)	DWDR		DWDR	DWDR	DWDR	True WDR (120dB)	True WDR (120dB)
Maximum IR Distance	98ft (30m)		164ft (50m)	98ft (30m)	164ft (50m)	164ft (50m)	98ft (30m)
Video Compression	H.264, MJPEG		Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG
Maximum Resolution	1.3MP (1280x960)		12MP (4000x3000)	4K (8MP) (3840x2160)	6MP (3072x2048)	6MP (3072 x 2048)	6MP (3072 x 2048)
Frame Rate	30fps@1.3MP		20fps@12MP	15fps@4K 30fps@3MP	30fps@6MP	20fps@6MP	20fps@6MP
Multi-streaming	2 streams		3 streams	3 streams	3 streams	3 streams	3 streams
Intelligent Video	-		-	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, People Counting, Heat Map	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection
Compatibility	ONVIF, CGI, WiFi (IEEE802.11b/g/n) 50m (open field)		ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI
Audio In/Out	-		1/1	1/1	1/1	1/1	1/1
Memory Slot	Micro SD, Max 128GB		Micro SD card, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB
Alarm In/Out	-		2/1	2/1	2/1	2/1	1/1
Environmental Protection	IP67		IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10
Working Temperature	-22°F to 140°F (-30°C to 60°C)		-40°F to 140°F (-40°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-40°F to 140°F (-40°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)
Power	DC12V, IR On Max 5W (IR On)		DC12V, AC24V, PoE+ (802.3af), < 18 W	DC12V, PoE (802.3af), < 5W	DC12 V, AC24V, PoE+ (802.3af), < 18 W	DC12V, AC24V, PoE (802.3af Class 4) < 15 W	DC12V, PoE (802.3af Class 0), < 5.2 W







Model	Dome Cameras					
	N64CL53  IP67 IK10 ProSeries ePoE	N52BM3Z  IP67 IK10 ProSeries STARLIGHT	N51BL22  IP67 IK10 ProSeries STARLIGHT	N51BL23  IP67 IK10 ProSeries STARLIGHT	N45BL5Z  IP67 IK10 ProSeries	N44BN52 / N44BN53  IP67 IK10 ProSeries
Image Sensor	1/2.9" 6MP STARVIS™ CMOS	1/2.7" 5MP CMOS	1/2.7" 5MP CMOS	1/2.7" 5MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS
Lens	3.6mm/F1.6	2.7mm - 13.5mm, Motorized	2.8mm/F1.6, Manual	3.6mm/F1.6, Manual	2.7mm - 12mm/F1.4, Motorized	2.8mm/F2.0, Manual 3.6mm/F2.0, Manual
Horizontal Field of View	69°	95° - 27°	96°	78°	100° - 35°	104° 87°
Minimum Illumination	Color: 0.04 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.008 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.009 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.009 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.03 lux/F1.4 0 lux/F1.4 (IR on)	Color: 0.08 lux/F2.0 0 lux/F2.0 (IR on)
Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night
Wide Dynamic Range (WDR)	True WDR (120dB)	True WDR (120dB)	True WDR (120dB)	True WDR (120dB)	120dB	120dB
Maximum IR Distance	98ft (30m)	98ft (30m)	98ft (30m)	98ft (30m)	164ft (50m)	65ft (20m)
Video Compression	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG
Maximum Resolution	6MP (3072 x 2048)	5MP (2592 x 1944)	5MP (2592 x 1944)	5MP (2592 x 1944)	4MP (2688 x 1520)	4MP (2688 x 1520)
Frame Rate	20fps@6MP	20fps@5MP	20fps@5MP	20fps@5MP	30fps@4MP	30fps@4MP
Multi-streaming	3 streams	2 streams	2 streams	2 streams	3 streams	3 streams
Intelligent Video	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Tripwire, Intrusion	Tripwire, Intrusion	Tripwire, Intrusion	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection
Compatibility	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI
Audio In/Out	1/1	—	—	—	1/1	1/1, Built-in Mic
Memory Slot	Micro SD, Max 128GB	—	—	—	Micro SD, Max 128GB	Micro SD, Max 128GB
Alarm In/Out	1/1	—	—	—	1/1	1/1
Environmental Protection	IP67, IK10	IP67	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10
Working Temperature	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)
Power	DC12V, PoE (802.3af Class 0), < 5.2 W	DC12V, PoE (802.3af Class 0), < 6.2 W	DC12V, PoE (802.3af Class 0), < 4.2 W	DC12V, PoE (802.3af Class 0), < 4.2 W	DC12V, AC24V, PoE (802.3af), Max <12.5W	DC12V (±25%), PoE (802.3af), Max < 4.5W

	Dome Cameras						
Model	 N42AM3Z IP67 IK10 LiteSeries	 N44BL52 / N44BL52-B / N44BL53 IP67 IK10 ProSeries		 DH-IPC-HDBW23A0RN-ZS IP67 IK10 ProSeries	 DH-IPC-HDBW83A1EN-Z IP67 UltraSeries STARLIGHT	 DH-IPC-HDBW82A1EN-Z IP67 UltraSeries STARLIGHT	 DH-IPC-HDBW13A0EN IP67 IK10 LiteSeries
Image Sensor	1/3" 4MP CMOS	1/3" 4MP CMOS		1/3" 3MP CMOS	1/2.8" 3MP CMOS	1/2.8" 2MP CMOS	1/3" 3MP CMOS
Lens	2.7mm - 12mm/F1.4, Motorized	2.8mm/ F2.0, Manual	3.6mm/ F2.0, Manual	2.7mm - 12mm/F1.4, Motorized	2.7mm - 12mm/F1.4, Motorized	2.7mm - 12mm/F1.4, Motorized	2.8mm/F2.0, Manual 3.6mm/F2.0, Manual
Horizontal Field of View	100° - 35°	87°		92° - 28°	87° - 31°	99° - 36°	92° 81°
Minimum Illumination	Color: 0.1 lux/F1.4 0 lux/F1.4 (IR on)	Color: 0.08 lux/F2.0 0 lux/F2.0 (IR on)		Color: 0.1 lux/F1.4 0 lux/F1.4 (IR on)	Color: 0.005 lux/F1.4 0 lux/F1.4 (IR on)	Color: 0.005 lux/F1.4 0 lux/F1.4 (IR on)	Color: 0.1 lux/F2.0 0 lux/F2.0 (IR on)
Day/Night	True Day/Night	True Day/Night		True Day/Night	True Day/Night	True Day/Night	True Day/Night
Wide Dynamic Range (WDR)	120dB	120dB		DWDR	140dB	140dB	DWDR
Maximum IR Distance	98ft (30m)	98ft (30m)		98ft (30m)	164ft (50m)	164ft (50m)	98ft (30m)
Video Compression	Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG		H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.264, MJPEG
Maximum Resolution	4MP (2688 x 1520)	4MP (2688 x 1520)		3MP (2048 x 1536)	3MP (2048 x 1536)	1080p (1920 x 1080)	3MP (2048x1536)
Frame Rate	20fps@4MP 30fps@3MP	30fps@4MP		20fps@3MP 30fps@1080p	30fps@3MP	30fps@1080p	20fps@3MP 30fps@1080p
Multi-streaming	2 streams	3 streams		2 streams	3 streams	3 streams	2 streams
Intelligent Video	—	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection		—	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, People Counting, Heat Map	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, People Counting, Heat Map	—
Compatibility	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI		ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, CGI
Audio In/Out	—	1/1		—	1/1	1/1	—
Memory Slot	Micro SD, Max 128GB	Micro SD, Max 128GB		Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	—
Alarm In/Out	—	1/1		—	2/1	2/1	—
Environmental Protection	IP67, IK10	IP67, IK10		IP67, IK10	IP67	IP67, IK10	IP67, IK10
Working Temperature	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)		-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)
Power	DC12V (±25%), PoE (802.3af), Max 9.75W	DC12V (±25%), PoE (802.3af), Max <7.5W		DC12V (±25%), PoE (802.3af), Max 4.5W	DC12V (±25%), PoE (802.3af), Max 11 W	DC12V (±25%), PoE (802.3af), Max 11 W	DC12V (±25%), PoE (802.3af), Max 4W



Model	Dome Cameras					WiFi Dome Cameras	
	N24BN52  IP67 IK10 ProSeries STARLIGHT	N24BN53  IP67 IK10 ProSeries STARLIGHT	N25BL5Z  IP67 IK10 ProSeries STARLIGHT	N24BL52 / N24BL53  IP67 IK10 ProSeries STARLIGHT		DH-IPC-HDBW11A0EN  IP67 IK10 LiteSeries	DH-IPC-HDBW13A0EN-W  IP67 IK10 LiteSeries
Image Sensor	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS		1/3" 1.3MP CMOS	1/3" 3MP CMOS
Lens	2.8mm/ F2.0, Manual	3.6mm/ F2.0, Manual	2.7mm - 12mm/F1.4, Motorized	2.8mm/F2.0, Manual	3.6mm/F2.0, Manual	2.8mm/F2.0, Manual	3.6mm/F2.0, Manual
Horizontal Field of View	110°	110°	97°- 34°	110°		89°	71°
Minimum Illumination	Color: 0.009 lux/F2.0 0 lux/F2.0 (IR on)	Color: 0.009 lux/F2.0 0 lux/F2.0 (IR on)	Color: 0.006 lux/F1.4 0 lux/F1.4 (IR on)	Color: 0.009 lux/F2.0 0 lux/F2.0 (IR on)		Color: 0.1 lux/F2.0 0 lux/F2.0 (IR on)	Color: 0.1 lux/F2.0 0 lux/F2.0 (IR on)
Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night		True Day/Night	True Day/Night
Wide Dynamic Range (WDR)	120dB	120dB	120dB	120dB		DWDR	DWDR
Maximum IR Distance	65ft (20m)	65ft (20m)	164ft (50m)	98ft (30m)		98ft (30m)	98ft (30m)
Video Compression	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG		H.264, MJPEG	H.264, MJPEG
Maximum Resolution	1080p (1920x1080)	1080p (1920x1080)	1080p (1920x1080)	1080p (1920x1080)		1.3MP (1280x960)	3MP (2304x1296)
Frame Rate	60fps@1080p	60fps@1080p	60fps@1080p	60fps@1080p		30fps@1.3MP	20fps@3MP 30fps@1080p
Multi-streaming	3 streams	3 streams	3 streams	3 streams		2 streams	2 streams
Intelligent Video	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection		—	—
Compatibility	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI		ONVIF, CGI	ONVIF, CGI, WiFi (IEEE802.11b/g/n) 50m (open field)
Audio In/Out	1/1, Built-in Mic	1/1, Built-in Mic	1/1	1/1		—	—
Memory Slot	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB		—	Micro SD, Max 128GB
Alarm In/Out	1/1	1/1	1/1	1/1		—	—
Environmental Protection	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10		IP67, IK10	IP67, IK10
Working Temperature	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)		-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)
Power	DC12V (±25%), PoE (802.3af), Max <4.5W	DC12V (±25%), PoE (802.3af), Max <4.5W	DC12V/AC24V, PoE (802.3af), Max <12.5W	DC12V (±25%), PoE (802.3af), Max <5W		DC12V (±25%), PoE (802.3af), Max 4W	DC12V, Max 4.7W (IR On)







Model	WiFi Dome Cameras		Eyeball Cameras				
	DH-IPC-HDBW11A0EN-W		N84BG44	N64CG52	N64CG53	N51BI22	N51BI23
Image Sensor	1/3" 1.3MP CMOS		1/2.5" UHD 4K (8MP) CMOS	1/2.9" 6MP STARVIS™ CMOS	1/2.9" 6MP STARVIS™ CMOS	1/2.7" 5MP CMOS	1/2.7" 5MP CMOS
Lens	2.8mm/F2.0, Manual	3.6mm/F2.0, Manual	4mm/F1.6, Manual	2.8mm/F1.6, Manual	3.6mm/F1.6, Manual	2.8mm/F1.6, Manual	3.6mm/F1.6, Manual
Horizontal Field of View	92°	72°	87°	98°	69°	96°	96°
Minimum Illumination	Color: 0.1 lux/F2.0 0 lux/F2.0 (IR on)		Color: 0.05 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.04 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.04 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.009 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.009 lux/F1.6 0 lux/F1.6 (IR on)
Day/Night	True Day/Night		True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night
Wide Dynamic Range (WDR)	DWDR		DWDR	True WDR (120dB)	True WDR (120dB)	True WDR (120dB)	True WDR (120dB)
Maximum IR Distance	98ft (30m)		164ft (50m)	164ft (50m)	164ft (50m)	98ft (30m)	98ft (30m)
Video Compression	H.264, MJPEG		Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG
Maximum Resolution	1.3MP (1280 x 960)		4K (8MP) (3840 x 2160)	6MP (3072 x 2048)	6MP (3072 x 2048)	5MP (2592 x 1944)	5MP (2592 x 1944)
Frame Rate	30fps@1.3MP		15fps@4K 30fps@3MP	20fps@6MP	20fps@6MP	20fps@5MP	20fps@5MP
Multi-streaming	2 streams		3 streams	3 streams	3 streams	2 streams	2 streams
Intelligent Video	-		Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection	Tripwire, Intrusion	Tripwire, Intrusion
Compatibility	ONVIF, CGI, WiFi (IEEE802.11b/g/n) 50m (open field)		ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI
Audio In/Out	-		Built-in Mic	Built-in Mic	Built-in Mic	-	-
Memory Slot	Micro SD, Max 128GB		Micro SD, Max 128GB	-	-	-	-
Alarm In/Out	-		-	-	-	-	-
Environmental Protection	IP67, IK10		IP67	IP67	IP67	IP67, IK10	IP67, IK10
Working Temperature	-22°F to 140°F (-30°C to 60°C)		-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)
Power	DC12V, Max 5.6W (IR on)		DC12V, PoE (802.3af), < 5W	DC12V, PoE (802.3af Class 0), < 5.2 W	DC12V, PoE (802.3af Class 0), < 6 W	DC12V, PoE (802.3af Class 0), < 4 W	DC12V, PoE (802.3af Class 0), < 4 W

Model	Eyeball Cameras											
	N42AH3Z  IP67 LiteSeries		N44BG52 / N44BG53  IP67 ProSeries		DH-IPC-HDW23A0RN-ZS  IP67 LiteSeries		DH-IPC-HDW13A0SN  IP67 LiteSeries		N24BG52 / N24BG53  IP67 ProSeries STARLIGHT		DH-IPC-HDW11A0SN  IP67 LiteSeries	
Image Sensor	1/3" 4MP CMOS		1/3" 4MP CMOS		1/3" 3MP CMOS		1/3" 3MP CMOS		1/2.8" 2MP CMOS		1/3" 1.3MP CMOS	
Lens	2.7mm - 12mm/F1.4, Motorized		2.8mm/F2.0, Manual	3.6mm/ F2.0, Manual	2.7mm - 12mm/F1.4, Motorized		2.8mm/ F2.0, Manual	3.6mm/F2.0, Manual	2.8mm/ F2.0, Manual	3.6mm/F2.0, Manual	2.8mm/ F2.0, Manual	3.6mm/F2.0, Manual
Horizontal Field of View	100° - 35°		104°	87°	92° - 28°		92°	81°	110°	87°	89°	71°
Minimum Illumination	Color: 0.1 lux/F1.4 0 lux/F1.4 (IR on)		Color: 0.08 lux/F2.0 0 lux/F2.0 (IR on)		Color: 0.1 lux/F1.4 0 lux/F1.4 (IR on)		Color: 0.1 lux/F2.0 0 lux/F2.0 (IR on)		Color: 0.009 lux/F2.0 0 lux/F2.0 (IR on)		Color: 0.1 lux/F2.0 0 lux/F2.0 (IR on)	
Day/Night	True Day/Night		True Day/Night		True Day/Night		True Day/Night		True Day/Night		True Day/Night	
Wide Dynamic Range (WDR)	120dB		120dB		DWDR		DWDR		120dB		DWDR	
Maximum IR Distance	197ft (60m)		164ft (50m)		197ft (60m)		98ft (30m)		164ft (50m)		98ft (30m)	
Video Compression	Smart H.264 +, H.264, MJPEG		Smart H.265+, H.265, Smart H.264+, H.264, MJPEG		H.264, MJPEG		H.264, MJPEG		Smart H.265+, H.265, Smart H.264+, H.264, MJPEG		H.264, MJPEG	
Maximum Resolution	4MP (2688 x 1520)		4MP (2688 x 1520)		3MP (2048 x 1536)		3MP (2048 x 1536)		1080p (1920 x 1080)		1.3MP (1280x960)	
Frame Rate	20fps@4MP 30fps@3MP		30fps@4MP		20fps@3MP 30fps@1080p		20fps@3MP 30fps@1080p		60fps@1080p		30fps@1.3MP	
Multi-streaming	2 streams		3 streams		2 streams		2 streams		3 streams		2 streams	
Intelligent Video	-		Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection		-		-		Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection		-	
Compatibility	ONVIF, PSIA, CGI		ONVIF, PSIA, CGI		ONVIF, PSIA, CGI		ONVIF, CGI		ONVIF, PSIA, CGI		ONVIF, CGI	
Audio In/Out	-		Built-in Mic		-		-		Built-in Mic		-	
Memory Slot	Micro SD, Max 128GB		Micro SD, Max 128GB		Micro SD, Max 128GB		-		Micros SD, Max 128 GB		-	
Alarm In/Out	-		-		-		-		-		-	
Environmental Protection	IP67		IP67		IP67		IP67		IP67		IP67	
Working Temperature	-22°F to 140°F (-30°C to 60°C)		-22°F to 140°F (-30°C to 60°C)		-22°F to 140°F (-30°C to 60°C)		-22°F to 140°F (-30°C to 60°C)		-22°F to 140°F (-30°C to 60°C)		-22°F to 140°F (-30°C to 60°C)	
Power	DC12V ±25%, PoE (802.3af), Max 9.75W		DC12V (±25%), PoE (802.3af), Max <5W		DC12V (±25%), PoE (802.3af), Max 7.5W		DC12V (±25%), PoE (802.3af), Max 4W		DC12V (±25%), PoE (802.3af), Max <5W		DC12V (±25%), PoE (802.3af), Max 4W	

	Fisheye Cameras					
	 NK8BR4 IP67 IK10 UltraSeries	 N68BA4 IP67 IK10 UltraSeries	 N68BR4V IP67 IK10 UltraSeries	 DH-IPC-EB55A0N IK10 ProSeries	 N55BS5 IP67 ProSeries	 DH-IPC-EB54A0N IK10 ProSeries
Image Sensor	1/1.7" 12MP CMOS	1/1.8" 6MP CMOS	1/1.8" 6MP CMOS	1/3" 5MP CMOS	1/2.5" 5MP CMOS	1/3" 4MP CMOS
Lens	1.98mm/F2.8, Manual	1.7mm/F2.0, Manual	1.3mm/F2.8, Manual	1.42mm/F2.0, Manual	1.4mm/F1.6, Manual	1.18mm/F2.0, Manual
Horizontal Field of View	360°	360°	360°	180°	180°	180°
Minimum Illumination	0.001 lux/F2.8 0 lux/F2.8 (IR on)	Color: 0.002 lux/F2.0 0 lux/F2.0 (IR on)	Color: 0.002 lux/F2.8 0 lux/F2.8 (IR on)	Color: 0.01 lux/F2.6	Color: 0.02 lux/F1.6 B/W: 0.05 lux/F1.6	Color: 0.01 lux/F2.0
Day/Night	True Day/Night	True Day/Night	True Day/Night	Electronic Day/Night	Electronic Day/Night	Electronic Day/Night
Wide Dynamic Range (WDR)	DWDR	DWDR	DWDR	DWDR	True WDR (120dB)	DWDR
Maximum IR Distance	33ft (10m)	33ft (10m)	33ft (10m)	—	—	—
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264	H.264, MJPEG
Maximum Resolution	12MP (4000x3000)	6MP (3072x2048)	6MP (3072 x 2048)	5MP (2592 x 1944)	5MP (2560 x 1920)	4MP (2592 x 1520)
Frame Rate	25fps@12MP 30fps@8MP	30fps@6MP	30fps@6MP	12fps@5MP 30fps@UXGA	25fps@5MP	15fps@4MP 30fps@UXGA
Multi-streaming	3 streams	3 streams	3 streams	3 streams	2 Streams	3 streams
Intelligent Video	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Heat Map	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Heat Map	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Heat Map	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Heat Map	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, Heat Map	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Heat Map
Dewarp Mode	Original, Panoramic, Double Panoramic, 1+3, E-PTZ, 4 Pictures Edge dewarping	Original, Panoramic, Double Panoramic, 1+3, E-PTZ, 4 Pictures Edge dewarping	Original, Panoramic, Double Panoramic, 1+3, E-PTZ, 4 Pictures ImmerVision Enables guarantees compatibility with any VMS. Provides 360° immersive navigation within live or recorded 360° videos	Original, Panoramic, Double Panoramic, 1+3, E-PTZ, 4 Pictures	Original, Panoramic, Double Panoramic, 1+3, E-PTZ, 4 Pictures Edge dewarping	Original, Panoramic, Double Panoramic, 1+3, E-PTZ, 4 Pictures
Compatibility	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI
Audio In/Out	1/1	1/1	1/1	1/1, Built-in Mic	Built-in Mic	1/1, Built-in Mic
Memory Slot	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 64GB
Alarm In/Out	2/2	2/2	2/2	1/1	—	1/1
Environmental Protection	IP67, IK10	IP67, IK10	IP67, IK10	IK10	IP67, IK08	IK10
Working Temperature	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)
Power	DC12V, PoE (802.3af), Max <12W	DC12V, PoE (802.3af), Max <12W	DC12V, PoE (802.3af), Max <12W	DC12V (±25%), PoE (802.3af), Max 6W	DC12V, 1A PoE (802.3af Class 0), Max < 3.4 W	DC12V (±25%), PoE (802.3af), Max 6W

Model	Multi-Sensor Cameras				PTZ Cameras	
	DH-PSD81602N-A360	DH-IPC-PFW8800N-A180	DH-IPC-PFW8601N-H-A180	DH-IPC-PDBW8800N-A180	6AE830VNI	6AE530UNI
Image Sensor	Panoramic: 1/1.9" 2MP CMOS per Sensor (8 sensors total) PTZ: 1/1.9" 2MP CMOS	1/2.8" 2MP CMOS per Sensor (4 sensors total)	1/2.8" 2MP CMOS per Sensor (3 sensors total)	1/2.8" 2MP CMOS per Sensor (4 sensors total)	1/1.7" 4K (8MP) CMOS	1/1.9" 5MP CMOS
Lens	Panoramic: 5mm/F2.2, Manual PTZ: 5.5mm - 206mm/F1.5, Motorized	3.0mm/F2.0, Manual	3.6mm/F1.8, Manual	3.0mm/F2.0, Manual	6mm - 180mm (30x Optical Zoom)	6mm - 180mm (30x Optical Zoom)
Horizontal Field of View	Panoramic: 360° PTZ: 65.8° to 2.0°	180°	180°	180°	61.2° - 2.1°	61.2° - 2.1°
Minimum Illumination	Panoramic: 0.002 lux/F2.2 (Color) PTZ: 0.002 lux/F1.5 (Color)	Color: 0.007 lux/F2.0 (1/3 s, 30 IRE) Color: 0.05 lux/F2.0 (1/30 s, 30 IRE) 0 lux/F2.0 (IR on)	Color: 0.007 lux/F1.8 0 lux/F1.8 (IR on)	Color: 0.007 lux/F2.0 (1/3 s, 30 IRE) Color: 0.05 lux/F2.0 (1/30 s, 30 IRE) 0 lux/F2.0 (IR on)	Color: 0.05 lux/F1.6 B/W: 0 lux/F1.6 0 lux (IR on)	Color: 0.01 lux/F1.5 B/W: 0 lux/F1.5 0 lux (IR on)
Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night
Wide Dynamic Range (WDR)	120dB	DWDR	120dB	DWDR	DWDR	DWDR
Maximum IR Distance	—	98ft (30m)	98ft (30m)	98ft (30m)	656ft (200m)	656ft (200m)
Video Compression	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264	H.265, H.264
Maximum Resolution	Panoramic: 2 x 4096 x 1800 PTZ: 1080p (1920 x 1080)	2MP per Sensor (4 sensors total)	2MP per Sensor (3 sensors total)	2MP per Sensor (4 sensors total)	3840 (H) x 2160 (V), 4K (8MP)	2560 (H) x 1920 (V), 5MP
Frame Rate	Panoramic: 30fps@2 x 4096 x 1800 PTZ: 30fps@1080p	25fps@4096 x 1800 total output	30fps@4096 x 832 total output	25fps@4096 x 1800 total output	30fps@4K (8MP)	30fps@5MP 60fps@1080p
Multi-streaming	3 streams	3 streams	3 streams	3 streams	3 streams	3 streams
Pan/Tilt/Zoom	Pan: 0° to 360°, endless Tilt: -20° to 90° Auto flip: 180°	Pan: 0° to 360° Tilt: 0° to 90° Rotation: 0° to 360°	Pan: 0° to 360° Tilt: 0° to 90° Rotation: 0° to 360°	Pan: 0° to 355° Tilt: 0° to 75° Rotation: ± 20°	300 Presets, Pan: 0° - 360° endless; Tilt: -20° - 90°, Auto Flip 180°	300 Presets, Pan: 0° - 360° endless; Tilt: -20° - 90°, Auto Flip 180°
Preset Speed	Pan: 0.1° /s to 240° /s Tilt: 0.1° /s to 120° /s	—	—	—	Pan: 240° /s; Tilt: 200° /s	Pan: 240° /s; Tilt: 200° /s
Intelligent Video	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Auto-tracking	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, People Counting, Heat Map, E-PTZ	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, People Counting, Heat Map	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, People Counting, Heat Map	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, Heat Map, Auto-tracking	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, Heat Map, Auto-tracking
Compatibility	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF Profile S&G, PSIA, CGI	ONVIF Profile S&G, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI
Audio In/Out	2/1	1/1	1/1	1/1	1/1	1/1
Memory Slot	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB
Alarm In/Out	7/2	2/2	1/1	2/2	7/2	7/2
Environmental Protection	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10
Working Temperature	-40°F to 140°F (-40°C to 60°C), Built-in Heater	-40°F to 140°F (-40°C to 60°C), Built-in Heater	-40°F to 140°F (-40°C to 60°C), Built-in Heater	-40°F to 140°F (-40°C to 60°C), Built-in Heater	-40°F to 158°F (-30°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Power	DC36V < 120W	AC24V, PoE+ (802.3at), Max 25.5W	AC24V, PoE+ (802.3at), Max 24W	AC24V, PoE + (802.3at), < 25.5W	AC24V, Hi-PoE, 24W, 38W with IR on	AC24V/3A (±25%), Hi-PoE 24W, 38W with IR on

Model	PTZ Cameras					
	 IP67 IK10 UltraSeries STARLIGHT	 IP67 IK10 UltraSeries STARLIGHT	 IP67 IK10 UltraSeries STARLIGHT	 IP66 ProSeries	 IP66 ProSeries STARLIGHT	 IP66 ProSeries STARLIGHT
Image Sensor	1/2.8" 2MP CMOS	1/1.9" 2MP CMOS	1/1.9" 2MP CMOS	1/3" 4MP CMOS	1.28" 2MP CMOS	1/2.8" 2MP CMOS
Lens	4.5mm - 180mm (40x Optical Zoom)	6mm - 180mm (30x Optical Zoom)	6mm - 180mm (30x Optical Zoom)	4.5mm - 135mm (30x Optical Zoom)	4.5mm - 135mm (30x Optical Zoom)	4.8mm - 120mm (25x Optical Zoom)
Horizontal Field of View	67.5° - 1.7°	61.2° - 2.1°	61.2° - 2.1°	60° - 2.2°	67.8° - 2.4°	59.2° - 2.4°
Minimum Illumination	Color: 0.005 lux/F1.2 0 lux/F1.2 (IR on)	Color: 0.002 lux/F1.5 0 lux/F1.5 (IR on)	Color: 0.002 lux/F1.5 0 lux/F1.5 (IR on)	Color: 0.05 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.005 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.005 lux/F1.6 0 lux/F1.6 (IR on)
Wide Dynamic Range (WDR)	Ultra WDR (140dB)	120dB	120dB	120dB	120dB	120dB
Maximum IR Distance	656ft (200m)	1,640ft (500m)	656ft (200m)	328ft (100m)	492ft (150m)	328ft (100m)
Video Compression	Smart H.265+, H.265, Smart H.264+, H.264	H.264, MJPEG	H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264	Smart H.265+, H.265, Smart H.264+, H.264	Smart H.265+, H.265, Smart H.264+, H.264
Maximum Resolution	1920 (H) x 1080 (V), 1080p	1920 (H) x 1080 (V), 1080p	1920 (H) x 1080 (V), 1080p	2592 (H) x 1520 (V), 4MP	1920 (H) x 1080 (V), 1080p	1920 (H) x 1080 (V), 1080p
Frame Rate	60fps@1080p	30fps@1080p 60fps@720p	30fps@1080p 60fps@720p	30fps@4MP, 3MP or 60fps@1080p, 1.3MP, 720p	60fps@1080p 60fps@720p	30fps@1080p 30fps@720p
Multi-streaming	3 Streams	3 streams	3 streams	3 streams	3 streams	3 streams
Pan/Tilt/Zoom	300 Presets, Pan: 0° - 360° endless; Tilt: -20° - 90°, Auto Flip 180°	300 Presets, Pan: 0° - 360° endless; Tilt: -20° - 90°, Auto Flip 180°	300 Presets, Pan: 0° - 360° endless; Tilt: -20° - 90°, Auto Flip 180°	300 Presets, Pan: 0° - 360° endless; Tilt: -15° - 90°, Auto Flip 180°	300 Presets, Pan: 0° - 360° endless; Tilt: -15° - 90°, Auto Flip 180°	300 Presets, Pan: 0° - 360° endless; Tilt: -15° - 90°, Auto Flip 180°
Preset Speed	Pan: 240° /s; Tilt: 200° /s	Pan: 240° /s; Tilt: 200° /s	Pan: 240° /s; Tilt: 200° /s	Pan: 400° /s; Tilt: 300° /s	Pan: 400° /s; Tilt: 300° /s	Pan: 240° /s; Tilt: 200° /s
Intelligent Video	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, Heat Map, Auto-tracking	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, Auto-tracking	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, Auto-tracking	Tripwire, Intrusion, Abandoned Object Detection, Missing Object Detection, Heat Map, Face Detection, Auto-tracking	Tripwire, Intrusion, Abandoned Object Detection, Missing Object Detection, Face Detection, Heat Map, Auto-tracking	Tripwire, Intrusion, Abandoned/Missing, Face Detection
Compatibility	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI
Audio In/Out	1/1	1/1	1/1	1/1	1/1	1/1
Memory Slot	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB
Alarm In/Out	7/2	7/2	7/2	2/1	2/1	2/1
Environmental Protection	IP67, IK10	IP67	IP67, IK10	IP66	IP66	IP66
Working Temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Power	AC24V, 3 A (± 25%), Hi-PoE 24W, 38W with IR on	AC24V/3A (±25%), Hi-PoE Max 24W, 38W (IR ON)	AC24V/3A (±25%), Hi-PoE Max 24W, 38W (IR ON)	AC24V, PoE+ (802.3at) 13W, 23W with IR on	AC24V, PoE+ (802.3at) 13W, 23W with IR on	DC12V, PoE+ (802.3at) 13W, 20W with IR on

Model	PTZ Cameras					
	DH-SD40A212TN-HNI  IP66 IK10 ProSeries	6C430UNI  IP66 ProSeries	50430UNI  IP67 IK10 ProSeries	NEW 50230UNI-A  IP67 IK10 ProSeries STARLIGHT	NEW 42212TNI  IP66 IK10 ProSeries	52C430UNI  IK10 ProSeries
Image Sensor	1/2.7" 2MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP STARVIS™ CMOS	1/3" 4MP CMOS
Lens	5.1mm - 61.2mm (12x Optical Zoom)	4.5mm - 135mm (30x Optical Zoom)	4.5mm - 135mm (30x Optical Zoom)	4.5mm - 135mm (30x Optical Zoom)	5.3mm - 64mm (12x Optical Zoom)	4.5mm - 135mm (30x Optical Zoom)
Horizontal Field of View	59.3° - 5.2°	60° - 2.2°	60° - 2.2°	67.8° - 2.4°	58.2° - 4.8°	60° - 2.2°
Minimum Illumination	Color: 0.05 lux/F1.6 B/W: 0.005 lux/F1.6	Color: 0.05 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.05 lux/F1.6 B/W: 0.005 lux/F1.6	Starlight Color: 0.005 lux/F1.6 B/W: 0.0005 lux/F1.6	Color: 0.005 lux/F1.6 B/W: 0.0005 lux/F1.6	Color: 0.05 lux/F1.6 B/W: 0.005 lux/F1.6
Wide Dynamic Range (WDR)	120dB	120dB	120dB	120dB	120dB	120dB
Maximum IR Distance	—	328ft (100m)	—	—	—	—
Video Compression	Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264	Smart H.265+, H.265, Smart H.264+, H.264	Smart H.265+, H.265, Smart H.264+, H.264	H.265, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264
Maximum Resolution	1920 (H) x 1080 (V), 1080p	2592 (H) x 1520 (V), 4MP	2592 (H) x 1520 (V), 4MP	1920 (H) x 1080 (V), 1080p	1920 (H) x 1080 (V), 1080p	2592 (H) x 1520 (V), 4MP
Frame Rate	30fps@1080p 60fps@720p	30fps@4MP, 3MP or 60fps@1080p, 1.3MP, 720p	30fps@4MP, 3MP or 60fps@1080p, 1.3MP, 720p	60fps@1080p 60fps@720p	30fps@1080p	30fps@4MP 60fps@1080p
Multi-streaming	3 streams	3 streams	3 streams	3 streams	3 streams	3 streams
Pan/Tilt/Zoom	300 Presets, Pan: 0° - 360° endless; Tilt: -2° - 90°, Auto Flip 180°	300 Presets, Pan: 0° - 360° endless; Tilt: -15° - 90°, Auto Flip 180°	300 Presets, Pan: 0° - 360° endless; Tilt: 0° - 90°, Auto Flip 180°	300 Presets, Pan: 0° - 360° endless; Tilt: 0° - 90°, Auto Flip 180°	300 Presets, Pan: 0° - 360° Endless, Tilt: -2° - 90°, Auto Flip 180°	300 Presets, Pan: 0° - 360° Endless, Tilt: 0° - 90°, Auto Flip 180°
Preset Speed	Pan: 300°/s; Tilt: 200°/s	Pan: 240°/s; Tilt: 200°/s	Pan: 500°/s; Tilt: 500°/s	Pan: 500°/s; Tilt: 500°/s	Pan: 300°/s; Tilt: 200°/s	Pan: 500°/s; Tilt: 500°/s
Intelligent Video	Tripwire, Intrusion, Abandoned Object Detection, Missing Object Detection, Face Detection	Tripwire, Intrusion, Abandoned Object Detection, Missing Object Detection, Face Detection, Heat Map, Auto-tracking	Tripwire, Intrusion, Abandoned Object Detection, Missing Object Detection, Face Detection, Heat Map, Auto-tracking	Tripwire, Intrusion, Abandoned Object Detection, Missing Object Detection, Face Detection, Heat Map, Auto-tracking	Tripwire, Intrusion, Abandoned Object Detection, Missing Object Detection, Face Detection	Tripwire, Intrusion, Abandoned Object Detection, Missing Object Detection, Face Detection, Heat Map, Auto-tracking
Compatibility	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI
Audio In/Out	1/1	1/1	1/1	1/1	1/1	1/1
Memory Slot	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB
Alarm In/Out	2/1	2/1	2/1	2/1	2/1	2/1
Environmental Protection	IP66, IK10	IP66	IP67, IK10	IP67, IK10	IP66, IK10	IK10
Working Temperature	-40°F to 140°F (-40°C to 60°C)	-40°F to 140°F (-40°C to 60°C)	-40°F to 140°F (-40°C to 60°C)	-40°F to 140°F (-40°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)
Power	AC24V, PoE+ (802.3at) 12W, 22W with heater on	AC24V, 3A (±10%) 10.5W, 26W with IR on	AC24V, PoE+ (802.3at) 13W, 23W with heater on	AC24V (± 10%), PoE+ (802.3at) 13W, 23W with heater on	AC24V, 1.5A, PoE+ (802.3at) 12W	AC24V, 1.5A (±10%), PoE+ (802.3at) 13W







Model	PTZ Cameras			
	 52C230UNI-A <small>IK10 ProSeries</small> <small>STARLIGHT</small>	 DH-SD42CA212TN-HNI <small>IK10 ProSeries</small>	 6CE230UNI <small>IP67 IK10 ProSeries</small> <small>STARLIGHT</small>	 DH-SD22A204W-GNI-W
Image Sensor	1/2.8" 2MP CMOS	1/2.7" 2MP CMOS	1/2.8" 2MP STARVIS™ CMOS	1/2.7" 2MP CMOS
Lens	4.5mm - 135mm (30x Optical Zoom)	5.1mm - 61.2mm (12x Optical Zoom)	4.5mm - 135mm (30x Optical Zoom)	2.7mm - 11mm (4x Optical Zoom)
Horizontal Field of View	67.8° - 2.4°	59.3° - 5.2°	67.8° - 2.4°	112.5° - 30°
Minimum Illumination	Starlight Color: 0.005 lux/F1.6 B/W: 0.0005 lux/F1.6	Color: 0.05 lux/F1.6 B/W: 0.005 lux/F1.6	Color: 0.005 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.05 lux/F1.6 B/W: 0.005 lux/F1.6
Wide Dynamic Range (WDR)	120dB	120dB	120dB	120dB
Maximum IR Distance	—	—	656ft (200m)	—
Video Compression	Smart H.265+, H.265, Smart H.264+, H.264	Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264	Smart H.264+, H.264, MJPEG
Maximum Resolution	1920 (H) x 1080 (V), 1080p	1920 (H) x 1080 (V), 1080p	1920 (H) x 1080 (V), 1080p	1920 (H) x 1080 (V), 1080p
Frame Rate	60fps@1080p 60fps@720p	30fps@1080p 60fps@720p	60fps@1080p	30fps@1080p
Multi-streaming	3 streams	3 streams	3 Streams	3 streams
Pan/Tilt/Zoom	300 Presets, Pan: 0° - 360° Endless, Tilt: 0° - 90°, Auto Flip 180°	300 Presets, Pan: 0° - 360° Endless, Tilt: -2° - 90°, Auto Flip 180°	300 Presets, Pan: 0° - 360° endless; Tilt: -20° - 90°, Auto Flip 180°	300 Presets, Pan: 0° - 355°; Tilt: 0° - 90°
Preset Speed	Pan: 500° /s; Tilt: 500° /s	Pan: 300°/s; Tilt: 200°/s	Pan: 300° /s; Tilt: 200° /s	Pan: 100° /s; Tilt: 60° /s
Intelligent Video	Tripwire, Intrusion, Abandoned Object Detection, Missing Object Detection, Face Detection, Heat Map, Auto-tracking	Tripwire, Intrusion, Abandoned Object Detection, Missing Object Detection, Face Detection	Motion, Tripwire, Intrusion, Scene Change, Abandoned/Missing Object, Face Detection, Heat Map, Auto-tracking	Tripwire, Intrusion, Abandoned Object Detection, Missing Object Detection, Face Detection
Compatibility	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI	ONVIF, PSIA, CGI
Audio In/Out	1/1	1/1	1/1	—
Memory Slot	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB	Micro SD, Max 128GB
Alarm In/Out	2/1	2/1	7/2	—
Environmental Protection	IK10	IK10	IP67, IK10	IP66, IK10
Working Temperature	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-40°F to 158°F (-40°C to 70°C)	-22°F to 140°F (-30°C to 60°C)
Power	AC24V, 1.5A (±10%), PoE+ (802.3at) 13W	AC24V, 1.5A (±10%), PoE+ (802.3at) 12W	AC24V, 3 A (± 25%), PoE+ (802.3at) 17W, 26W with IR/heater on	DC12V, 1.5A Max 10W








Case Study: Compton School Police Department







Headquartered in a designated facility, the Compton Unified School District (USD) Police Department is committed to providing a safe and secure educational environment for students, staff, and parents.

A total Dahua solution that includes 20 Pro Series 4MP WDR fixed lens Wi-Fi cameras, a 32-channel NVR, three smart switches, one surveillance management center, two 2.4 and 5.6GHz indoor access points, and four 5.6GHz wireless video transmission devices created a locked wireless connection.









Model	Network Video Recorders					
	DHI-NVR7A24DR-256  UltraSeries	DHI-NVR6A16DR-128-4KS2  UltraSeries	DHI-NVR6A08-128-4KS2  UltraSeries	DHI-NVR6A08-64-4KS2  UltraSeries	DHI-NVR6A08-32-4KS2  UltraSeries	N54A4P  ProSeries
Video Compression	H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG, MPEG4
IP Video Inputs	256 CH	128 CH	128 CH	64 CH	32 CH	24 CH
Max Input/Record	512Mbps / 512Mbps	384Mbps / 384Mbps	384Mbps / 384Mbps	384Mbps / 384Mbps	384Mbps / 384Mbps	320Mbps / 320Mbps
Display	2 HDMI, 1 VGA, 1 LCD	2 HDMI, 1 VGA, 1 LCD	2 HDMI, 1 VGA	2 HDMI, 1 VGA	2 HDMI, 1 VGA	2 HDMI, 1 VGA
Max HDD	24 HDD Up to 192TB	16 HDD Up to 128TB	8 HDD Up to 64TB	8 HDD Up to 64TB	8 HDD Up to 64TB	4 HDD Up to 40TB
RAID	0/1/5/10/50/60	0/1/5/10	0/1/5/10	0/1/5/10	0/1/5/10	-
eSATA/Mini SAS	1/2	1/1	1/-	1/-	1/-	1/-
Audio In/Out	1/1, 2-way	1/1, 2-way	1/1, 2-way	1/1, 2-way	1/1, 2-way	1/1, 2-way
Alarm In/Out	4/4	16/8	16/8	16/8	16/8	16/6
Ethernet	4 Gigabit Ports	4 Gigabit Ports, 2 Gigabit Fiber Optical Interfaces	2 Gigabit Ports	2 Gigabit Ports	2 Gigabit Ports	1 Gigabit Port
PoE	-	-	-	-	-	24 Ports (IEEE802.3at/af) 210W
USB	2 USB 3.0, 2 USB 2.0	2 USB 3.0, 2 USB 2.0	2 USB 3.0, 2 USB 2.0	2 USB3.0, 2 USB2.0	2 USB 3.0, 2 USB 2.0	2 USB 3.0, 1 USB 2.0
Power	AC 100V-240V, Redundant, < 200W (without HDD)	AC100V-240V, Redundant, < 60W (without HDD)	AC100V-240V < 20W (without HDD)	AC100V-240V < 20W (without HDD)	AC100V-240V < 20W (without HDD)	AC100V-240V, 50/60 Hz <18W (without HDD)
Key Features	IVS, Fisheye, N+M	IVS, Face Detection, People Counting, Heat Map, Fisheye Dewarp, Smart Track, POS, ANPR (Optional), N+M	IVS, Face Detection, People Counting, Heat Map, Fisheye Dewarp, Smart Track, POS, ANPR (Optional), N+M	IVS, Face Detection, People Counting, Heat Map, Fisheye Dewarp, Smart Track, POS, ANPR (Optional), N+M	IVS, Face Detection, People Counting, Heat Map, Fisheye Dewarp, Smart Track, POS, ANPR (Optional), N+M	IVS, Face Detection, People Counting, Heat Map, Fisheye Dewarp, Smart Track, POS, ANPR (Optional), N+M, Plug and Pay






Model	Network Video Recorders					
	N52A4P  ProSeries	DHI-NVR58A32-4KS2  ProSeries	DHI-NVR58A16-16P-4KS2  ProSeries	DHI-NVR54A16-16P-4KS2  ProSeries	DHI-NVR52A16-16P-4KS2  ProSeries	 N52B3P ProSeries 
Video Compression	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG, MPEG4	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG, MPEG4	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG, MPEG4	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG, MPEG4	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG, MPEG4	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG
IP Video Inputs	24CH	32CH	16CH	16CH	16CH	16CH
Max Input/Record	320Mbps / 320Mbps	320Mbps / 320Mbps	320Mbps / 320Mbps	320Mbps / 320Mbps	320Mbps / 320Mbps	320Mbps / 320Mbps
Display	1 HDMI, 1 VGA	2 HDMI, 1 VGA	2 HDMI, 1 VGA	2 HDMI, 1 VGA	2 HDMI, 1 VGA	1 HDMI, 1 VGA
Max HDD	2 HDD Up to 20TB	8 HDD Up to 80TB	8 HDD Up to 80TB	4 HDD Up to 40TB	4 HDD Up to 40TB	2 HDD x Up to 20TB
RAID	—	—	—	—	—	—
eSATA/Mini SAS	—	1/—	1/—	1/—	—	—
Audio In/Out	1/1, 2-way	1/1, 2-way	1/1, 2-way	1/1, 2-way	1/1, 2-way	1/1, 2-way
Alarm In/Out	4/2	16/6	16/6	16/6	4/2	4/2
Ethernet	1 Gigabit Ports	2 Gigabit Ports	1 Gigabit Port	1 Gigabit Port	1 Gigabit Port	1 Gigabit Port
PoE	24 Ports (IEEE802.3at) 210 W total	—	16 Ports (IEEE802.3at) 150 W total	16 Ports (IEEE802.3at) 150 W total	16 Ports (IEEE802.3at) 130 W total	16 Ports (IEEE802.3af/at), 150W total Ports 1 to 8 for ePoE and EoC
USB	1 USB 3.0, 1 USB 2.0	2 USB 3.0, 2 USB 2.0	2 USB 3.0, 2 USB 2.0	2 USB 3.0, 2 USB 2.0	1 USB 3.0, 1 USB 2.0	1 USB 3.0, 1 USB 2.0
Power	AC100V-240V, 50/60 Hz <16W (without HDD)	AC100V-240V <16.7W (without HDD)	AC100V-240V <17.5W (without HDD)	AC100V-240V <17.5W (without HDD)	AC100V-240V <15.2 W (without HDD)	AC100V - AC240V, 50/60 Hz <15.2W (without HDD)
Key Features	IVS, Face Detection, People Counting, Heat Map, Fisheye Dewarp, Smart Track, POS, ANPR, N+M, Plug and Play	IVS, Face Detection, People Counting, Heat Map, Fisheye Dewarp, POS, ANPR, N+M	IVS, Face Detection, People Counting, Heat Map, Fisheye Dewarp, POS, ANPR, N+M, Plug and Play	IVS, Face Detection, People Counting, Heat Map, Fisheye Dewarp, POS, ANPR, N+M, Plug and Play	IVS, Face Detection, People Counting, Heat Map, Fisheye Dewarp, POS, ANPR, N+M, Plug and Play	IVS, Face Detection, People Counting, Heat Map, Fisheye Dewarp, POS, ANPR, N+M, Plug and Play







	Network Video Recorders					
Model	 <p>N54B3P ProSeries ePoE</p>	 <p>DHI-NVR52A08-8P-4KS2 ProSeries</p>	 <p>N42B3P LiteSeries</p>	 <p>N42B2P LiteSeries</p>	 <p>N42B1P LiteSeries</p>	 <p>DHI-NVR41A04HS-W-S2 LiteSeries</p>
Video Compression	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG, MPEG4	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.264, MJPEG
IP Video Inputs	16CH	8CH	16CH	8CH	4CH	4CH
Max Input/Record	320Mbps / 320Mbps	320Mbps / 320Mbps	200Mbps / 200Mbps	200Mbps / 200Mbps	200Mbps / 200Mbps	80Mbps / 80Mbps
Display	2 HDMI, 2 VGA	1 HDMI, 1 VGA	1 HDMI, 1 VGA	1 HDMI, 1 VGA	1 HDMI, 1 VGA	1 HDMI, 1 VGA
Max HDD	4 HDD x Up to 40TB	2 HDD Up to 20TB	2 HDD Up to 16TB	2 HDD Up to 16TB	2 HDD Up to 16TB	2 HDD Up to 16TB
RAID	—	—	—	—	—	—
eSATA/Mini SAS	Supports 1 eSATA HDD	—	—	—	—	—
Audio In/Out	1/2, 2-way	1/1, 2-way	1/1, 2-way	1/1, 2-way	1/1, 2-way	1/1, 2-way
Alarm In/Out	16/6	4/2	4/2	4/2	4/2	—
Ethernet	1 Gigabit Port	1 Gigabit Port	1Gigabit Port	1 Gigabit Port	1 Gigabit Port	Supports three-antennas for a strengthened WiFi signal
PoE	16 Ports (IEEE802.3af/at), 130W total Ports 1 to 8 for ePoE and EoC	8 Ports (IEEE802.3at) 130 W total	16 Ports (IEEE802.3at) 130 W total	8 Ports (IEEE802.3at) 130 W total	4 Ports (IEEE802.3at) 50 W total	—
USB	2 USB 3.0, 1 USB 2.0	1 USB 3.0, 1 USB 2.0	1 USB 3.0, 1 USB 2.0	1 USB 3.0, 1 USB 2.0	1 USB 3.0, 1 USB 2.0	2 USB 2.0
Power	AC100V - AC240V, 50/60 Hz <17.5W (without HDD)	AC100V-240V < 14.5 W (without HDD)	AC 100V-240V <13.2W (without HDD)	AC 100V-240V <9.6W (without HDD)	DC48V, 2A <9.0W (without HDD)	DC12V, 2A 10W (without HDD)
Key Features	IVS, Face Detection, People Counting, Heat Map, Fisheye Dewarp, POS, ANPR, N+M, Plug and Play	IVS, Face Detection, People Counting, Heat Map, Fisheye Dewarp, POS, ANPR, N+M, Plug and Play	IVS, Face Detection, People Counting, Heat Map, Plug and Play	IVS, Face Detection, People Counting, Heat Map, Plug and Play	IVS, Face Detection, People Counting, Heat Map, Plug and Play	Plug and Play, P2P


HDCVI Cameras							
Model	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> <p>A83AA9</p>  <p>UltraSeries</p> <p>4K STARLIGHT</p> </div> <div style="text-align: center;"> <p>A83ABBZ</p>  <p>UltraSeries</p> <p>IP67 IK10</p> </div> <div style="text-align: center;"> <p>A42AB22/A42AB23</p>  <p>ProSeries</p> <p>IP67</p> </div> <div style="text-align: center;"> <p>DH-HAC-HFW32A1EN-Z</p>  <p>UltraSeries</p> <p>IP67 IK10 STARLIGHT</p> </div> <div style="text-align: center;"> <p>A21BB02/A21BB03</p>  <p>LiteSeries</p> <p>IP67</p> </div> <div style="text-align: center;"> <p>DH-HAC-HFW22A1EN</p>  <p>ProSeries</p> <p>IP67</p> </div> </div>						
Image Sensor	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">4/3" 4K (8MP) CMOS</td> <td style="width: 16.6%;">1/2" 4K (8MP) CMOS</td> <td style="width: 16.6%;">1/3" 4.1MP CMOS</td> <td style="width: 16.6%;">1/2.8" 2MP CMOS</td> <td style="width: 16.6%;">1/2.9" 2MP CMOS</td> <td style="width: 16.6%;">1/2.7" 2MP CMOS</td> </tr> </table>	4/3" 4K (8MP) CMOS	1/2" 4K (8MP) CMOS	1/3" 4.1MP CMOS	1/2.8" 2MP CMOS	1/2.9" 2MP CMOS	1/2.7" 2MP CMOS
4/3" 4K (8MP) CMOS	1/2" 4K (8MP) CMOS	1/3" 4.1MP CMOS	1/2.8" 2MP CMOS	1/2.9" 2MP CMOS	1/2.7" 2MP CMOS		
Minimum Illumination	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">Color: 0.001 lux/F1.2 (1/3s, 30IRE) Color: 0.0005 lux/F0.95 (1/3s, 30IRE)</td> <td style="width: 16.6%;">Color: 0.0012 lux/F1.5 0 lux (IR on)</td> <td style="width: 16.6%;">Color: 0.03 lux/F1.5 0 lux (IR on)</td> <td style="width: 16.6%;">Color: 0.005 lux/F1.4 0 lux (IR on)</td> <td style="width: 16.6%;">Color: 0.01 lux/F2.0 0 lux (IR on)</td> <td style="width: 16.6%;">Color: 0.03 lux/F2.0 0 lux (IR on)</td> </tr> </table>	Color: 0.001 lux/F1.2 (1/3s, 30IRE) Color: 0.0005 lux/F0.95 (1/3s, 30IRE)	Color: 0.0012 lux/F1.5 0 lux (IR on)	Color: 0.03 lux/F1.5 0 lux (IR on)	Color: 0.005 lux/F1.4 0 lux (IR on)	Color: 0.01 lux/F2.0 0 lux (IR on)	Color: 0.03 lux/F2.0 0 lux (IR on)
Color: 0.001 lux/F1.2 (1/3s, 30IRE) Color: 0.0005 lux/F0.95 (1/3s, 30IRE)	Color: 0.0012 lux/F1.5 0 lux (IR on)	Color: 0.03 lux/F1.5 0 lux (IR on)	Color: 0.005 lux/F1.4 0 lux (IR on)	Color: 0.01 lux/F2.0 0 lux (IR on)	Color: 0.03 lux/F2.0 0 lux (IR on)		
Lens	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">Sold Separately</td> <td style="width: 16.6%;">3.7mm – 11mm, Motorized, Auto Iris</td> <td style="width: 16.6%;">2.8mm (A42AB22) 3.6mm (A42AB23)</td> <td style="width: 16.6%;">2.7mm – 12mm, Motorized, Auto Iris</td> <td style="width: 16.6%;">2.8mm (A21BB02) 3.6mm (A21BB03)</td> <td style="width: 16.6%;">3.6mm 6mm 8mm</td> </tr> </table>	Sold Separately	3.7mm – 11mm, Motorized, Auto Iris	2.8mm (A42AB22) 3.6mm (A42AB23)	2.7mm – 12mm, Motorized, Auto Iris	2.8mm (A21BB02) 3.6mm (A21BB03)	3.6mm 6mm 8mm
Sold Separately	3.7mm – 11mm, Motorized, Auto Iris	2.8mm (A42AB22) 3.6mm (A42AB23)	2.7mm – 12mm, Motorized, Auto Iris	2.8mm (A21BB02) 3.6mm (A21BB03)	3.6mm 6mm 8mm		
Horizontal Field of View	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">–</td> <td style="width: 16.6%;">112° – 46°</td> <td style="width: 16.6%;">78°</td> <td style="width: 16.6%;">95° – 36°</td> <td style="width: 16.6%;">51.2° 82.8°</td> <td style="width: 16.6%;">90° 59.4° 41.4°</td> </tr> </table>	–	112° – 46°	78°	95° – 36°	51.2° 82.8°	90° 59.4° 41.4°
–	112° – 46°	78°	95° – 36°	51.2° 82.8°	90° 59.4° 41.4°		
Day/Night	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">True Day/Night</td> <td style="width: 16.6%;">True Day/Night</td> <td style="width: 16.6%;">True Day/Night</td> <td style="width: 16.6%;">True Day/Night</td> <td style="width: 16.6%;">True Day/Night</td> <td style="width: 16.6%;">True Day/Night</td> </tr> </table>	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night
True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night		
Maximum IR Distance	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">–</td> <td style="width: 16.6%;">328ft (100m)</td> <td style="width: 16.6%;">131ft (40m)</td> <td style="width: 16.6%;">328ft (100m)</td> <td style="width: 16.6%;">131ft (40m)</td> <td style="width: 16.6%;">131ft (40m)</td> </tr> </table>	–	328ft (100m)	131ft (40m)	328ft (100m)	131ft (40m)	131ft (40m)
–	328ft (100m)	131ft (40m)	328ft (100m)	131ft (40m)	131ft (40m)		
OSD Menu	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">Multi-language</td> <td style="width: 16.6%;">Multi-language</td> <td style="width: 16.6%;">Multi-language</td> <td style="width: 16.6%;">Multi-language</td> <td style="width: 16.6%;">Multi-language</td> <td style="width: 16.6%;">Multi-language</td> </tr> </table>	Multi-language	Multi-language	Multi-language	Multi-language	Multi-language	Multi-language
Multi-language	Multi-language	Multi-language	Multi-language	Multi-language	Multi-language		
Wide Dynamic Range (WDR)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">140dB</td> <td style="width: 16.6%;">120dB</td> <td style="width: 16.6%;">120dB</td> <td style="width: 16.6%;">120dB</td> <td style="width: 16.6%;">DWDR</td> <td style="width: 16.6%;">120dB</td> </tr> </table>	140dB	120dB	120dB	120dB	DWDR	120dB
140dB	120dB	120dB	120dB	DWDR	120dB		
Noise Reduction	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">2D/3D</td> <td style="width: 16.6%;">2D/3D</td> <td style="width: 16.6%;">2D/3D</td> <td style="width: 16.6%;">2D/3D</td> <td style="width: 16.6%;">2D</td> <td style="width: 16.6%;">2D/3D</td> </tr> </table>	2D/3D	2D/3D	2D/3D	2D/3D	2D	2D/3D
2D/3D	2D/3D	2D/3D	2D/3D	2D	2D/3D		
Frame Rate	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">15fps@4K (8MP)</td> <td style="width: 16.6%;">15fps@4K (8MP)</td> <td style="width: 16.6%;">25fps@4MP 30fps@1080p 30fps@720p</td> <td style="width: 16.6%;">30fps@1080p 30/60fps@720p</td> <td style="width: 16.6%;">30fps@1080p</td> <td style="width: 16.6%;">30fps@1080p 30/60fps@720p</td> </tr> </table>	15fps@4K (8MP)	15fps@4K (8MP)	25fps@4MP 30fps@1080p 30fps@720p	30fps@1080p 30/60fps@720p	30fps@1080p	30fps@1080p 30/60fps@720p
15fps@4K (8MP)	15fps@4K (8MP)	25fps@4MP 30fps@1080p 30fps@720p	30fps@1080p 30/60fps@720p	30fps@1080p	30fps@1080p 30/60fps@720p		
Video Output	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">One (1) HDCVI 4K (8MP) Channel and One (1) CVBS Channel</td> <td style="width: 16.6%;">One (1) HDCVI 4K (8MP) Channel and One (1) CVBS Channel</td> <td style="width: 16.6%;">HD/SD Dual-output</td> <td style="width: 16.6%;">HD/SD Dual-output, SD Tester-out</td> <td style="width: 16.6%;">HD Multi-analog Technology Requires PFM820 to switch between formats</td> <td style="width: 16.6%;">HD/SD Dual-output</td> </tr> </table>	One (1) HDCVI 4K (8MP) Channel and One (1) CVBS Channel	One (1) HDCVI 4K (8MP) Channel and One (1) CVBS Channel	HD/SD Dual-output	HD/SD Dual-output, SD Tester-out	HD Multi-analog Technology Requires PFM820 to switch between formats	HD/SD Dual-output
One (1) HDCVI 4K (8MP) Channel and One (1) CVBS Channel	One (1) HDCVI 4K (8MP) Channel and One (1) CVBS Channel	HD/SD Dual-output	HD/SD Dual-output, SD Tester-out	HD Multi-analog Technology Requires PFM820 to switch between formats	HD/SD Dual-output		
Audio In/Out	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">Built-in Mic</td> <td style="width: 16.6%;">1 Input</td> <td style="width: 16.6%;">–</td> <td style="width: 16.6%;">1 Input</td> <td style="width: 16.6%;">–</td> <td style="width: 16.6%;">–</td> </tr> </table>	Built-in Mic	1 Input	–	1 Input	–	–
Built-in Mic	1 Input	–	1 Input	–	–		
Alarm In/Out	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">–</td> <td style="width: 16.6%;">2/1</td> <td style="width: 16.6%;">–</td> <td style="width: 16.6%;">1/1</td> <td style="width: 16.6%;">–</td> <td style="width: 16.6%;">–</td> </tr> </table>	–	2/1	–	1/1	–	–
–	2/1	–	1/1	–	–		
Pan/Tilt/Rotation	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">–</td> <td style="width: 16.6%;">Pan: 0° – 360° Tilt: 0° – 90° Rotation: 0° – 360°</td> <td style="width: 16.6%;">Pan: 0° – 360° Tilt: 0° – 90° Rotation: 0° – 360°</td> <td style="width: 16.6%;">Pan: 0° – 360° Tilt: 0° – 90° Rotation: 0° – 360°</td> <td style="width: 16.6%;">Pan: 0° – 360° Tilt: 0° – 90° Rotation: 0° – 360°</td> <td style="width: 16.6%;">Pan: 0° – 360° Tilt: 0° – 90° Rotation: 0° – 360°</td> </tr> </table>	–	Pan: 0° – 360° Tilt: 0° – 90° Rotation: 0° – 360°	Pan: 0° – 360° Tilt: 0° – 90° Rotation: 0° – 360°	Pan: 0° – 360° Tilt: 0° – 90° Rotation: 0° – 360°	Pan: 0° – 360° Tilt: 0° – 90° Rotation: 0° – 360°	Pan: 0° – 360° Tilt: 0° – 90° Rotation: 0° – 360°
–	Pan: 0° – 360° Tilt: 0° – 90° Rotation: 0° – 360°	Pan: 0° – 360° Tilt: 0° – 90° Rotation: 0° – 360°	Pan: 0° – 360° Tilt: 0° – 90° Rotation: 0° – 360°	Pan: 0° – 360° Tilt: 0° – 90° Rotation: 0° – 360°	Pan: 0° – 360° Tilt: 0° – 90° Rotation: 0° – 360°		
Environmental Protection	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">–</td> <td style="width: 16.6%;">IP67, IK10</td> <td style="width: 16.6%;">IP67</td> <td style="width: 16.6%;">IP67, IK10</td> <td style="width: 16.6%;">IP67</td> <td style="width: 16.6%;">IP67</td> </tr> </table>	–	IP67, IK10	IP67	IP67, IK10	IP67	IP67
–	IP67, IK10	IP67	IP67, IK10	IP67	IP67		
Working Temperature	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">-22°F to 140°F (-30°C to 60°C)</td> <td style="width: 16.6%;">-22°F to 140°F (-30°C to 60°C)</td> <td style="width: 16.6%;">-22°F to 140°F (-30°C to 60°C)</td> <td style="width: 16.6%;">-22°F to 140°F (-30°C to 60°C)</td> <td style="width: 16.6%;">-40°F to 140°F (-40°C to 60°C)</td> <td style="width: 16.6%;">-22°F to 140°F (-30°C to 60°C)</td> </tr> </table>	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-40°F to 140°F (-40°C to 60°C)	-22°F to 140°F (-30°C to 60°C)
-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-40°F to 140°F (-40°C to 60°C)	-22°F to 140°F (-30°C to 60°C)		
Power	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">AC24V (±25%), DC12V (±25%) Max 9W</td> <td style="width: 16.6%;">AC24V (±25%), DC12V (±25%) Max 7W</td> <td style="width: 16.6%;">DC12V (±25%) Max 5.9W</td> <td style="width: 16.6%;">AC24V (±25%), DC12V (±25%) Max 16.6W</td> <td style="width: 16.6%;">DC12V (±25%) Max 4.6W (DC12V with IR on)</td> <td style="width: 16.6%;">DC12V (±25%) Max 5.5W</td> </tr> </table>	AC24V (±25%), DC12V (±25%) Max 9W	AC24V (±25%), DC12V (±25%) Max 7W	DC12V (±25%) Max 5.9W	AC24V (±25%), DC12V (±25%) Max 16.6W	DC12V (±25%) Max 4.6W (DC12V with IR on)	DC12V (±25%) Max 5.5W
AC24V (±25%), DC12V (±25%) Max 9W	AC24V (±25%), DC12V (±25%) Max 7W	DC12V (±25%) Max 5.9W	AC24V (±25%), DC12V (±25%) Max 16.6W	DC12V (±25%) Max 4.6W (DC12V with IR on)	DC12V (±25%) Max 5.5W		

Model	HDCVI Cameras					
	 A21BCOV IP67 LiteSeries	 A83ALBZ NEW IP67 IK10 UltraSeries	 A42AM2Z / A42AM2Z-B IP67 IK10 ProSeries	 A42AL22/A42AL23 IP67 IK10 ProSeries	 A22AM9Z IP67 IK10 STARLIGHT ProSeries	 DH-HAC-HDBW32A1EN-Z IP67 IK10 STARLIGHT UltraSeries
Image Sensor	1/2.9" 2MP CMOS	1/2" 4K (8MP) CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Minimum Illumination	Color 0.02 lux/F1.3 0 lux (IR on)	Color: 0.01 lux at F1.5 0 lux with IR on	Color: 0.01 lux/F1.3 0 lux (IR on)	Color: 0.03 lux/F1.5 0 lux (IR on)	Color: 0.005 lux/F1.3 0 lux (IR On)	Color: 0.005 lux/F1.4 0 lux (IR on)
Lens	2.7 to 13.5mm, Vari-focal	3.7 mm - 11 mm, Motorized	2.7mm - 13.5mm, Motorized	2.8mm (A42AL22) 3.6mm (A42AL23)	2.7 - 13.5 mm, Motorized	2.7mm - 12mm, Motorized, Auto Iris
Horizontal Field of View	96° - 33°	46° - 112°	98° - 26°	79°	102° to 29°	95° - 36°
Day/Night	True Day Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night
Maximum IR Distance	197ft (60m)	164ft (50m)	98ft (30m)	98ft (30m)	98ft (30m)	164ft (50m)
OSD Menu	Multi-language	Multi-language	Multi-language	Multi-language	Multi-language	Multi-language
Wide Dynamic Range (WDR)	DWDR	120dB	120dB	120dB	120 dB	120dB
Noise Reduction	2D	2D/3D	2D/3D	2D/3D	2D/3D	2D/3D
Frame Rate	30fps@1080p 60fps@720p	3840 x 2160@15 fps 1280 x 720@30 fps	25fps@4MP 30fps@1080p 30fps@720p	25fps@4MP	30fps@1080p	30fps@1080p 30/60fps@720p
Video Output	HD Multi-analog Technology Requires PFM820 to switch between formats	One (1) BNC HDCVI 4K Ultra High- definition Channel and, One (1) BNC CVBS Channel	One (1) BNC HDCVI High-definition Channel and, One (1) BNC CVBS Channel	HD/SD Dual-output	HD Multi-analog Technology Requires PFM820 to switch between formats	HD/SD Dual-output, SD Tester-out
Audio In/Out	-	1 Channel In	-	-	-	1 Channel in
Alarm In/Out	-	2/1	-	-	-	1/1
Pan/Tilt/Rotation	Pan: 0° - 360° Tilt: 0° - 87° Rotation: 0° - 360°	Pan: 0° - 355° Tilt: 0° - 65° Rotation: 0° - 355°	Pan: 0° - 355° Tilt: 0° - 75° Rotation: 0° - 355°	Pan: 0° - 355° Tilt: 0° - 65° Rotation: 0° - 355°	Pan: 0° to 355° Tilt: 0° to 75° Rotation: 0° to 355°	Pan: 0° - 355° Tilt: 0° - 85° Rotation: 0° - 355°
Environmental Protection	IP67	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10
Working Temperature	-40° F to +140° F (-40° C to +60° C) Integrated Heater	-40° F to +140° F (-40° C to +60° C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-40° F to +140° F (-40° C to +60° C)	-22°F to 140°F (-30°C to 60°C)
Power	DC12V ±25% Max 7.7W	AC24V (±25%) DC12V (±25%) Max 12.4 W	AC24V (±25%), DC12V (±25%) Max 10.1W	DC12V (±25%) Max 4.8W	DC12V (±25%) AC24V (±25%) Max 8W (at DC12V with IR on)	AC24V (±25%) DC12V (±25%) Max 12.5W



Model	HDCVI Cameras								
	A21BMOV  IP67 IK10 LiteSeries	DH-HAC-HDBW22A1RN-Z  IP67 IK10 ProSeries	DH-HAC-HDBW22A1EN  IP67 IK10 ProSeries			A21BL02/A21BL03  IP67 IK10 LiteSeries	A42AC2Z  IP67 ProSeries	A42AC2Z-B  IP67 ProSeries	
Image Sensor	1/2.9" 2MP CMOS	1/2.7" 2MP CMOS	1/2.7" 2.1MP CMOS			1/2.9" 2MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS	
Minimum Illumination	Color 0.02 lux/F1.3 0 lux (IR on)	Color: 0.03 lux/F1.4 0 lux (IR on)	Color: 0.03 lux/F2.0 0 lux (IR on)			Color: 0.02 lux/F2.0 0 lux (IR on)	Color: 0.03 lux/F1.8 0 lux (IR on)	Color: 0.03 lux/F1.8 0 lux (IR on)	
Lens	2.7 to 13.5mm, Vari-focal	2.7mm – 12mm, Motorized	2.8mm	3.6mm	6mm	2.8mm (A21BL02)	3.6mm (A21BL03)	2.7mm – 13.5mm, Motorized	2.7mm – 13.5mm, Motorized
Horizontal Field of View	104° - 28°	99° - 37°	115.6°	90°	59.4°	106°	82.8°	98° - 26°	98° - 26°
Day/Night	True Day Night	True Day/Night	True Day/Night			True Day/Night		True Day/Night	True Day/Night
Maximum IR Distance	98ft (30m)	98ft (30m)	98ft (30m)			98ft (30m)		197ft (60m)	197ft (60m)
OSD Menu	Multi-language	Multi-language	Multi-language			Multi-language		Multi-language	Multi-language
Wide Dynamic Range (WDR)	DWDR	120dB	120dB			DWDR		120dB	120dB
Noise Reduction	2D	2D/3D	2D/3D			2D		2D/3D	2D/3D
Frame Rate	30fps@1080p 60fps@720p	30fps@1080p 30/60fps@720p	30fps@1080p 30/60fps@720p			30fps@1080p		30fps@4MP 30fps@1080p	30fps@4MP 30fps@1080p
Video Output	HD Multi-analog Technology Requires PFM820 to switch between formats	HD/SD Dual-output, SD Tester-out	HD/SD Dual-output, SD Tester-out			HD Multi-analog Technology Requires PFM820 to switch between formats		HD/SD Dual-output	HD/SD Dual-output
Audio In/Out	-	-	-			-		-	-
Alarm In/Out	-	-	-			-		-	-
Pan/Tilt/Rotation	Pan: 0° - 355° Tilt: 0° - 75° Rotation: 0° - 355°	Pan: 0° - 355° Tilt: 0° - 75° Rotation: 0° - 355°	Pan: 0° - 355° Tilt: 0° - 65° Rotation: 0° - 355°			Pan: 0° - 355° Tilt: 0° - 65° Rotation: 0° - 355°		Pan: 0° - 360° Tilt: 0° - 87° Rotation: 0° - 360°	Pan: 0° - 360° Tilt: 0° - 87° Rotation: 0° - 360°
Environmental Protection	IP67, IK10	IP67, IK10	IP67, IK10			IP67, IK10		IP67	IP67
Working Temperature	-40°F to 140°F (-40°C to 60°C) Integrated Heater	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)			-40°F to 140°F (-40°C to 60°C)		-22°F to 140°F (-30°C to 60°C)	-40°F to 140°F (-40°C to +60°C)
Power	DC12V ±25% Max 3.4W (12VDC, IR On)	DC12V (±25%) Max 5W	DC12V (±25%) Max 4.5W			DC12V (±25%) Max 2.6W (12 DC12V with IR on)		DC12V (±25%) Max 11.1W	DC12V (±25%) Max 11.1W

Model	HDCVI Cameras		Eyeball HDCVI Cameras			
	A22AC9Z  IP67 ProSeries STARLIGHT	DH-HAC-HFW22A1RN-Z  IP67 LiteSeries	A42AH2Z  IP67 ProSeries	A22AH9Z  IP67 ProSeries STARLIGHT	A42AG22/A42AG23  IP67 ProSeries	A21BHOV  IP67 LiteSeries
Image Sensor	1/2.8" 2MP CMOS	1/2.7" 2MP CMOS	1/3" 4MP CMOS	1/2.8" 2MP CMOS	1/3" 4MP CMOS	1/2.9" 2MP CMOS
Minimum Illumination	Color: 0.005 lux/F1.3 0 lux (IR On)	Color: 0.03 lux/F1.4 0 lux (IR on)	Color: 0.01 lux/F1.3 0 lux (IR on)	Color: 0.005 lux/F1.3 0 lux (IR On)	Color: 0.03 lux/F1.5 0 lux (IR on)	Color 0.02 lux/F1.3 0 lux (IR on)
Lens	2.7mm - 13.5mm, Motorized	2.7mm - 12mm, Motorized	2.7mm - 13.5mm, Motorized	2.7mm - 13.5mm, Motorized	2.8mm (A42AG22) 3.6mm (A42AG23)	2.7 to 13.5mm, Vari-focal
Horizontal Field of View	99° to 29°	99° - 37°	98° - 26°	99° to 29°	78°	104° - 28°
Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day Night
Maximum IR Distance	197ft (60m)	197ft (60m)	197ft (60m)	197ft (60m)	164ft (50m)	98ft (30m)
OSD Menu	Multi-language	Multi-language	Multi-language	Multi-language	Multi-language	Multi-language
Wide Dynamic Range (WDR)	120dB	120dB	120dB	120 dB	120dB	DWDR
Noise Reduction	2D/3D	2D/3D	2D/3D	2D/3D	2D/3D	2D
Frame Rate	30fps@1080p	30fps@1080p 30/60fps@720p	25fps@4MP 30fps@1080p 30fps@720p	30fps@1080p	25fps@4MP	30fps@1080p 60fps@720p
Video Output	HD Multi-analog Technology Requires PFM820 to switch between formats	HD/SD Dual-output	One (1) BNC HDCVI High-definition Channel and One (1) BNC CVBS Channel	HD Multi-analog Technology Requires PFM820 to switch between formats	HD/SD Dual-output	HD Multi-analog Technology Requires PFM820 to switch between formats
Audio In/Out	-	-	-	-	-	-
Alarm In/Out	-	-	-	-	-	-
Pan/Tilt/Rotation	-	Pan: 0° - 355° Tilt: 0° - 87° Rotation: 0° - 360°	Pan: 0° - 360° Tilt: 0° - 78° Rotation: 0° - 360°	Pan: 0° - 360° Tilt: 0° - 78° Rotation: 0° - 360°	Pan: 0° - 360° Tilt: 0° - 78° Rotation: 0° - 360°	Pan: 0° - 360° Tilt: 0° - 90° Rotation: 0° - 360°
Environmental Protection	IP67	IP67	IP67	IP67	IP67	IP67
Working Temperature	-40° F to +140° F (-40° C to +60° C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-40° F to +140° F (-40° C to +60° C)	-22°F to 140°F (-30°C to 60°C)	-40° F to +140° F (-40° C to +60° C) Integrated Heater
Power	AC24V (±25%), DC12V (±25%) Max 14.1W (IR on)	DC12V (±25%) Max 8.2W	AC24V (±25%), DC12V (±25%) Max 11.6W	AC24V (±25%), DC12V (±25%) Max 13W	DC12V (±25%) Max 5.5W	DC12V ±25% Max 4.2W

Model	Eyeball HDCVI Cameras			PIR Camera	Fixed Mini-Bullet Cameras	
	DH-HAC-HDW22A1EN  IP67 ProSeries	DH-HAC-HDW22A1RN-Z  IP67 ProSeries	A21BG02/A21BG03  IP67 LiteSeries	NEW DH-HAC-HUM1220AN-PIR  LiteSeries	NEW HAC-HUM1220GN-B-USA  IP67 LiteSeries	NEW DH-HAC-HUM1220G-USA  IP67 LiteSeries
Image Sensor	1/2.7" 2MP CMOS			1/1.29" 2MP CMOS	1/1.29" 2MP CMOS	
Minimum Illumination	Color: 0.03 lux/F2.0 0 lux (IR on)			Color: 0.02 lux/F2.0 0 lux (IR on)	Color: 0.02 lux/F2.0 B/W: 0.002 lux/F2.1	
Lens	2.8mm	3.6mm	6mm	2.7mm – 12mm, Motorized	2.8mm (A21BG02)	3.6mm (A21BG03)
Horizontal Field of View	115.6°	90°	59.4°	99° – 37°	106°	82.8°
Day/Night	True Day/Night			Electronic Day/Night	Electronic Day/Night	
Maximum IR Distance	164ft (50m)			164ft (50m)	-	-
OSD Menu	Multi-language			Multi-language	Multi-language	
Wide Dynamic Range (WDR)	120dB			DWDR	DWDR	
Noise Reduction	2D/3D			2D	2D	
Frame Rate	30fps@1080p			30fps@1080p	30fps@1080p	
Video Output	HD/SD Dual-output			HD Multi-analog Technology Requires PFM820 to switch between formats	HD/SD, switchable	
Audio In/Out	-			-	-	
Alarm In/Out	-			-	-	
Pan/Tilt/Rotation	Pan: 0° – 360° Tilt: 0° – 70° Rotation: 0° – 360°	Pan: 0° – 360° Tilt: 0° – 67° Rotation: 0° – 360°	Pan: 0° – 360° Tilt: 0° – 78° Rotation: 0° – 360°	-	-	
Environmental Protection	IP67			-	IP67	
Working Temperature	-22°F to 140°F (-30°C to 60°C)			-40°F to 140°F (-40°C to 60°C)	-40° F to +140° F (-40° C to +60° C)	
Power	DC12V (±25%) Max 5.5W			DC12V (±25%) Max 2.9W	DC12V ± 25%, 0.6 W	

Model	HDCVI Fisheye Cameras		Multi-Sensor HDCVI Cameras	HDCVI PTZ Cameras		
	A83AR6  IP67 IK10 UltraSeries	A42AR2  IK10 ProSeries	DH-HAC-PFW3601  IP67 IK10 UltraSeries STARLIGHT	6C430IC  IP66 UltraSeries	59430IC  IP66 UltraSeries	50430IC  IP67 IK10 UltraSeries
Image Sensor	1/2" 4K (8MP) CMOS	1/3" 4MP CMOS	1/2.8" 2MP CMOS per sensor (3 sensors total)	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS
Minimum Illumination	Color: 0.01 lux/F2.0 0 lux/F2.0 (IR on)	Color: 0.01 lux/F2.0 B/W: 0.001 lux/F2.0	Color: 0.005 lux/F1.8 0 lux/F1.8 (IR on)	Color: 0.05 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.05 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.05 lux/F1.6 B/W: 0.0005 lux/F1.6
Lens	2.25mm, Fixed	1.18mm, Fixed	3.6mm, Fixed	4.5mm - 135mm, Motorized (30x Optical Zoom)	4.5mm - 135mm, Motorized (30x Optical Zoom)	4.5mm - 135mm, Motorized (30x Optical Zoom)
Horizontal Field of View	180°	180°	180°	60° - 2.2°	60° - 2.2°	60° - 2.2°
Day/Night	True Day/Night	Electronic Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night
Maximum IR Distance	49ft (15m)	—	66ft (20m)	328ft (100m)	328ft (100m)	—
OSD Menu	Multi-language	Multi-language	Multi-language	Multi-language	Multi-language	Multi-language
Wide Dynamic Range (WDR)	120dB	120dB	120dB	120dB	120dB	120dB
Noise Reduction	2D/3D	2D/3D	2D/3D	Ultra DNR (2D/3D)	Ultra DNR (2D/3D)	Ultra DNR (2D/3D)
Frame Rate	15fps@3840 x 2160	30fps@4MP	15fps@4096x832 30fps@2560x520	30fps@4MP/1080p 30/60fps@720p	30fps@4MP or 1080p 30/60fps@720p	30fps@4MP/1080p 30/60fps@720p
Video Output	One (1) BNC HDCVI 4K (8MP) Channel and One (1) BNC CVBS Channel	One (1) BNC HDCVI High-definition Channel and One (1) BNC CVBS Channel (switchable)	One (1) BNC HDCVI Panoramic Output Channel and Three (3) BNC 2MP HDCVI Channels	One (1) BNC HDCVI High-definition Channel or One (1) BNC CVBS Channel (switchable)	One (1) BNC HDCVI High-definition Channel or One (1) BNC CVBS Channel (switchable)	One (1) BNC HDCVI High-definition Channel or One (1) BNC CVBS Channel (switchable)
Pan/Tilt/Zoom	—	—	Pan: 0° - 360° Tilt: 0° - 78° Rotation: 0° - 360°	Pan: 0° - 360°, endless; Tilt: -15° - 90°; Autoflip 180°	Pan: 0° - 360°, endless; Tilt: -15° - 90°; Autoflip 180°	Pan: 0° - 360° Endless; Tilt: 0° - 90°, Auto Flip 180°
Preset Speed	—	—	—	Pan: 240° /s; Tilt: 200° /s	Pan: 400° /s; Tilt: 300° /s	Pan: 500° /s; Tilt: 500° /s
Audio In/Out	Built-in Mic	—	1 Channel In	1 Channel In	1 Channel In	1 Channel In
Alarm In/Out	2/1	—	2/1	2/1	2/1	2/1
Environmental Protection	IP67, IK10	IK10	IP67, IK10	IP66	IP66	IP67, IK10
Working Temperature	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	-40°F to 140°F (-40°C to 60°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 140°F (-40°C to 60°C) Integrated Heater
Power	DC12V (±25%), AC24V (±25%) Max 7.4W (IR on)	DC12V (±25%) Max 2.2W	DC12V (±25%) Max 22W	AC24V, 3A (±10%) 13W, 23W (IR on)	AC24V, 3A (±10%) 13W, 23W (IR on)	AC24V, 1.5A (±10%) 13 W, 23 W (Heater on)

Model	HDCVI PTZ Cameras					
	 IK10 UltraSeries	 IP66 ProSeries	 IP67 IK10 ProSeries	 IP66 ProSeries	 IP66 ProSeries	 IP67 IK10 ProSeries
Image Sensor	1/3" 4MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP STARVIS™ CMOS	1/2.8" 2MP STARVIS™ CMOS	1/2.8" 2MP STARVIS™ CMOS	1/2.8" 2MP STARVIS™ CMOS
Minimum Illumination	Color: 0.05 lux/F1.6 B/W: 0.005 lux/F1.6	Color: 0.005 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.005 lux/F1.6 B/W: 0.0005 lux/F1.6	Color: 0.005 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.005 lux/F1.6 0 lux/F1.6 (IR on)	Color: 0.005 lux/F1.6 B/W: 0.0005 lux/F1.6
Lens	4.5mm – 135mm, Motorized (30x Optical Zoom)	4.5mm – 135mm, Motorized (30x Optical Zoom)	4.5mm – 135mm, Motorized (30x Optical Zoom)	4.5mm – 135mm, Motorized (30x Optical Zoom)	4.5mm – 135mm, Motorized (30x Optical Zoom)	5.3mm – 64mm, Motorized (12x Optical Zoom)
Horizontal Field of View	60° – 2.2°	67.8° – 2.4°	67.8° to 2.4°	67.8° to 2.4°	67.8° to 2.4°	58.4° to 4.9°
Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night	True Day/Night
Maximum IR Distance	—	492ft (150m)	-	492ft (150m)	492ft (150m)	-
OSD Menu	Multi-language	Support	Multi-language	Multi-language	Multi-language	Multi-language
Wide Dynamic Range (WDR)	120dB	120dB	True WDR (120dB)	True WDR (120dB)	True WDR (120dB)	True WDR (120dB)
Noise Reduction	Ultra DNR (2D/3D)	2D/3D	Ultra DNR	Ultra DNR	Ultra DNR	Ultra DNR
Frame Rate	30fps@4MP/1080p 30/60fps@720p	30fps@1080p 30/60fps@720p	30fps@1080p	30fps@1080p	30fps@1080p	30fps@1080p
Video Output	One (1) BNC HDCVI High-definition Channel or One (1) BNC CVBS Channel (switchable)	HD/SD Switchable	One (1) Channel, BNC High-definition Video Output (HDCVI, AHD, TVI) or CVBS Standard Definition Video Output (switchable)	One (1) Channel, BNC High-definition Video Output (HDCVI, AHD, TVI) or CVBS Standard Definition Video Output (switchable)	One (1) Channel, BNC High-definition Video Output (HDCVI, AHD, TVI) or CVBS Standard Definition Video Output (switchable)	One (1) Channel, BNC High-definition Video Output (HDCVI, AHD, TVI) or CVBS Standard Definition Video Output (switchable)
Pan/Tilt/Zoom	Pan: 0° – 360° Endless; Tilt: 0° – 90°, Auto Flip 180°	300 Presets, Pan: 0° – 360° endless; Tilt: -15° – 90°, Auto Flip 180°	Pan: 0° to 360° endless Tilt: 0° to 90° Auto flip 180°	Pan: 0° to 360° endless; Tilt: -15° to 90° Auto flip 180°	Pan: 0° to 360° endless; Tilt: -15° to 90° Auto flip 180°	Pan: 0° to 360° endless Tilt: -2° to 90° Auto flip 180°
Preset Speed	Pan: 500° /s; Tilt: 500° /s	Pan: 400°/s; Tilt: 300° /s	Pan: 500° /s; Tilt: 500° /s	Pan: 400° /s Tilt: 300° /s	Pan: 240° /s Tilt: 200° /s	Pan: 300° /s; Tilt: 200° /s
Audio In/Out	1 Channel In	1 Channel In	1 Channel In	1 Channel In	1 Channel In	1 Channel In
Alarm In/Out	2/1	2/1	2/1	2/1	2/1	2/1
Environmental Protection	IK10	IP66	IP67, IK10	IP66	IP66	IP66, IK10
Working Temperature	-22°F to 140°F (-30°C to 60°C)	-40°F to 158°F (-40°C to 70°C) Integrated Heater	-40°F to 140°F (-40°C to 60°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 140°F (-40°C to 60°C)	-40°F to 140°F (-40°C to 60°C)
Power	AC24V, 1.5A (±10%) 13 W	AC24V, 3A (±10%) Max 13W, 25W (IR on)	AC24V Max 23 W	AC24V Max 23 W	AC24V Max 23 W	AC24V Max 19 W

	HDCVI PTZ Cameras	
Model	 49225IC IP66 LiteSeries STARLIGHT	 DH-SD22A204IN-GC IP66 IK10 LiteSeries
Image Sensor	1/2.8-in. STARVIS™ CMOS Sensor	1/2.7" 2MP CMOS
Minimum Illumination	Color: 0.005 lux at F1.6 0 lux (IR on)	Color: 0.05 lux/F1.6 B/W: 0.005 lux/F1.6
Lens	4.8mm – 120mm, Motorized (25x Optical Zoom)	2.7mm – 11mm, Motorized (4x Optical Zoom)
Horizontal Field of View	59.2° to 2.4°	112.5° – 39°
Day/Night	True Day/Night	True Day/Night
Maximum IR Distance	328ft (100m)	–
OSD Menu	Multi-language	Multi-language
Wide Dynamic Range (WDR)	120 dB	120 dB
Noise Reduction	Ultra DNR (2D/3D)	2D/3D
Frame Rate	30fps@1080p 60fps@720p	30fps@1080p 30/60fps@720p
Video Output	One (1) BNC HDCVI High-definition Channel or One (1) BNC CVBS Channel (switchable)	HD/SD Switchable
Pan/Tilt/Zoom	Pan: 0° – 360° Endless; Tilt: -15° – 90° Auto Flip 180°	300 Presets, Pan: 0° – 355° Tilt: 0° – 90°
Preset Speed	Pan: 240° /s; Tilt: 200° /s	Pan: 100°/s; Tilt: 60° /s
Audio In/Out	1 Channel In	-
Alarm In/Out	2/1	-
Environmental Protection	IP66	IP66 , IK10
Working Temperature	-40°F to 158°F (-40°C to 70°C) Integrated Heater	-22°F to 140°F (-30°C to 60°C)
Power	DC12V, 3A Max 20W (IR on)	DC12V Max 10W

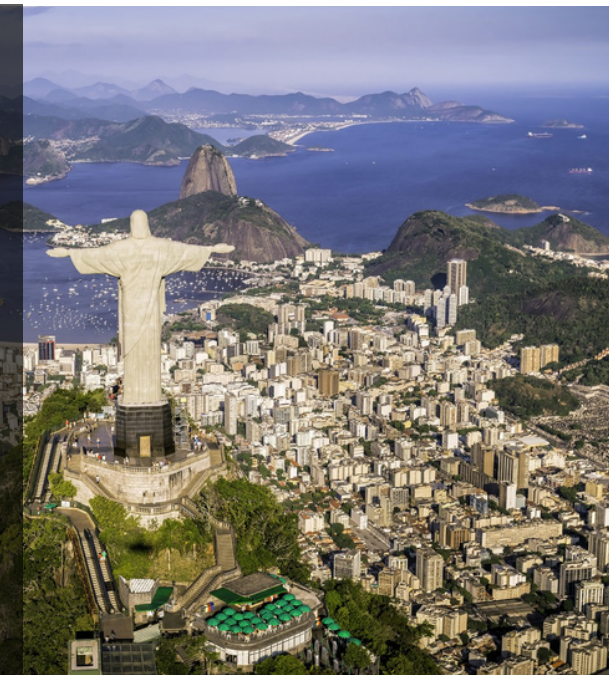
Case Study: G20 Hangzhou Summit







As a core provider for G20 security, Dahua provided over 20,000 sets of equipment, a 600 person security team, and dozens of advanced technologies in core and surrounding areas with around-the-clock uninterrupted surveillance in order to guarantee absolute security for the summit.








Case Study: 2016 Rio Olympic Games

Dahua was the main security surveillance supplier for the Rio Olympics, providing a total of 373 IP PTZ cameras, 1450 IP cameras, and related accessories. They were installed in the main stadium, the Olympic Village, other Olympic event areas, and on main roads to Olympic venues, displaying the best of Dahua Technology.



Model	HDCVI Digital Video Recorders									
	X38A3S  UltraSeries	X34A3L  UltraSeries	X58A3S  UltraSeries	X28A5S  ProSeries	X24A5L/X24A3L  ProSeries		X32A1A / X32A2A / X32A3A  ProSeries			
Video Compression	Smart H.264+, H.264, MJPEG	Smart H.264+, H.264, MJPEG	Smart H.264+, H.264, MJPEG	Smart H.264+, H.264, MJPEG	Smart H.264+, H.264, MJPEG	Smart H.264+, H.264, MJPEG	Smart H.264+, H.264, MJPEG	Smart H.264+, H.264, MJPEG	Smart H.264+, H.264, MJPEG	Smart H.264+, H.264, MJPEG
Audio Compression	—	—	—	—	—	—	—	—	—	—
Video Standard	HDCVI/AHD/TVI/CVBS (Auto-detect)	HDCVI/AHD/TVI/CVBS (Auto-detect)	HDCVI/AHD/TVI/CVBS (Auto-detect)	HDCVI/AHD/TVI/CVBS (Auto-detect)	HDCVI/AHD/TVI/CVBS (Auto-detect)	HDCVI/AHD/TVI/CVBS (Auto-detect)	HDCVI/AHD/TVI/CVBS (Auto-detect)	HDCVI/AHD/TVI/CVBS (Auto-detect)	HDCVI/AHD/TVI/CVBS (Auto-detect)	HDCVI/AHD/TVI/CVBS (Auto-detect)
Maximum Record Rate	30fps@1080p 30fps@D1	30fps@1080p 30fps@D1	1st and 9th channels: 4K at 15 fps or 4 MP at 30 fps Other Channels: 4MP at 15 fps; 1080p, 720p, 960H, D1, HD1, BCIF, CIF, QCIF at 30 fps	15fps@1080p 30fps@1080N	15fps@1080p 30fps@1080N	15fps@1080p 30fps@1080N	30fps@1080p 30fps@D1	30fps@1080p 30fps@D1	30fps@1080p 30fps@D1	30fps@1080p 30fps@D1
Analog Input	16CH	16CH	16CH	32CH	32CH	16CH	4CH	8CH	16CH	16CH
IP Input	16+8CH Up to 5MP	16+8CH Up to 5MP	Up to 64CH Up to 12MP	16+16CH Up to 5MP	16+16CH Up to 5MP	16+8CH Up to 5MP	4+2CH Up to 5 MB	8+4CH Up to 5 MB	16+8CH Up to 5 MB	16+8CH Up to 5 MB
Max Input/Record	96Mbps / 96Mbps	96Mbps / 96Mbps	256Mbps / 384Mbps	128Mbps / 128Mbps	128Mbps / 128Mbps	96/96Mbps	24Mbps / 24Mbps	48Mbps / 48Mbps	96Mbps / 96Mbps	96Mbps / 96Mbps
Audio In/Out	16/1, 2-way	4/1, 2-way	16/1, 2-way	16/1, 2-way	16/1, 2-way	4/1	4/1, 2-way			
Maximum HDD	8 HDD x Up to 64TB	4 HDD Up to 32TB	8 HDD Up to 64TB	8 HDD Up to 64TB	8 HDD Up to 64TB	4 HDD Up to 32TB	2 HDD Up to 16TB			
Display	2 HDMI, 1 VGA, 1 TV	2 HDMI, 1 VGA, 1 TV	2 HDMI, 1 VGA, 1 TV	2 HDMI, 1 VGA, 1 TV	2 HDMI, 1 VGA, 1 TV	2 HDMI, 1 VGA, 1 TV	1 HDMI, 1 VGA			
eSATA	1	1	1	1	1	1	—			
USB	4 USB Ports (2 USB 2.0, 2 USB 3.0)	3 USB Ports (1 USB 2.0, 2 USB 3.0)	4 USB Ports (2 USB 2.0, 2 USB 3.0)	4 USB Ports (2 USB 2.0, 2 USB 3.0)	4 USB Ports (2 USB 2.0, 2 USB 3.0)	3 USB Ports (1 USB 2.0, 2 USB 3.0)	2 USB 2.0 Ports	1 USB 2.0, 1 USB 3.0		
External Storage	USB Device/Network	USB Device/Network	USB Device/Network	USB Device/Network	USB Device/Network	USB Device/Network	USB Device/Network			
Alarm In/Out	16/6	16/6	16/6	16/6	16/6	16/6	8/3	8/3	16/3	
Ethernet	1 Gigabit Port	1 Gigabit Port	2 Gigabit Ports	2 Gigabit Ports	2 Gigabit Ports	1 Gigabit Port	1 100Mbps Port	1 Gigabit Port		
Remote Login	128	128	128	128	128	128	128			
Dimension	17.3in x 17.9in x 3.7in	17.3in x 16.4in x 3.0in	17.3in x 17.9in x 3.7in	17.3in x 17.9in x 3.7in	17.3in x 17.9in x 3.7in	17.3in x 16.4in x 3.0in	14.70in x 11.20in x 2.20in			
Power	AC100V-240V, 50/60Hz <35W (Without HDD)	AC100V-240V, 50/60Hz <30W (Without HDD)	AC100V-240V, 50/60Hz <50W (Without HDD)	AC100V-240V, 50/60Hz <35W (Without HDD)	AC100V-240V, 50/60Hz <35W (Without HDD)	AC100V-240V, 50/60Hz <30W (Without HDD)	DC12V, 4A <15W (Without HDD)	DC12V, 5A <15W (Without HDD)		
Highlights	Penta-brid, Plug&Play, P2P, 5MP Resolution, Smart Search, IVS, Spot Output	Penta-brid, Plug&Play, P2P, 5MP Resolution, Smart Search, IVS, Spot Output	Penta-brid, Dewarping, Plug&Play, P2P, 12MP Resolution, Smart Search, IVS, Spot Output, Loop Out	Penta-brid, Plug&Play, P2P, 5MP Resolution, Smart Search, IVS, Spot Output	Penta-brid, Plug&Play, P2P, 5MP Resolution, Smart Search, IVS, Spot Output	Penta-brid, Plug&Play, P2P, 5MP Resolution, Smart Search, IVS, Spot Output	Penta-brid, Plug & Play, P2P, 5MP Resolution, Smart Search, IVS, Spot Output			

Model	HDCVI Digital Video Recorders							
	X22A3N / X22A3A  ProSeries	C52A1N / C52A2N / C52A3N  ProSeries			DHI-HCVR52A16A-S3  ProSeries	X21A1E / X21A2E / X21A3E  LiteSeries	DHI-HCVR51A04HE-S3  LiteSeries	
Video Compression	Smart H.264+, H.264, MJPEG		Smart H.264+, H.264, MJPEG			H.264, MJPEG	Smart H.264+, H.264, MJPEG	H.264, MJPEG
Audio Compression	-		-			G.711/PCM	G.711	G.711/PCM
Video Standard	HDCVI/AHD/TVI/CVBS (Auto-detect)		HDCVI/CVBS (Auto-detect)			HDCVI/CVBS (Auto-detect)	HDCVI/TVI/AHD/CVBS (Auto-detect)	HDCVI/CVBS (Auto-detect)
Maximum Record Rate	15fps@1080p 30fps@1080N		Analog CH 1: 15fps@4K or 15fps@4MP Other CH: 15fps@4MP or 30fps@1080P			240fps@1080p 480fps@720p	15fps@1080p	15fps@1080p
Analog Input	16CH		4CH	8CH	16CH	16CH, 1.0Vp-p, 75Ω	4+2CH / 8+4CH / 16+8CH	4CH, 1.0Vp-p, 75Ω
IP Input	16+8CH Up to 5 MB		4+2CH Up to 8 MP	8+4CH Up to 8 MP	16+8CH Up to 8 MP	16+8CH Up to 5MP	8+4CH Up to 5MP	4+2CH Up to 5MP
Max Input/Record	96Mbps / 96Mbps		24Mbps / 24Mbps	48Mbps / 48Mbps	96Mbps / 96Mbps	96Mbps / 96Mbps	24Mbps / 48Mbps / 96Mbps 24Mbps / 48Mbps / 96Mbps	24Mbps / 24Mbps
Audio In/Out	1/1	4/1	1/1, 2-Way			4/1, 2-way	1/1	4/1, 2-way
Maximum HDD	2 HDD Up to 16TB		2 HDD Up to 16TB			2 HDD x Up to 20TB	1 HDD Up to 8TB	1 HDD Up to 6TB
Display	1 HDMI, 1 VGA		1 HDMI (up to 3840 x 2160), 1 VGA			1 HDMI, 1 VGA	1 HDMI, 1 VGA	1 HDMI, 1 VGA
eSATA	-		-			-	-	-
USB	1 USB 2.0 Port, 1 USB 3.0 Port		1 USB 2.0 Port, 1 USB 3.0 Port			1 USB 3.0, 1 USB 2.0	2 USB 2.0 1 USB 3.0, 1 USB 2.0	2 USB 2.0
External Storage	USB Device/Network		USB Device/Network			USB	USB/SATA	USB
Alarm In/Out	-	16/3	-			16/3	8 / 8 / 16 Input	4/3
Ethernet	1 Gigabit Port		1 Gigabit Port			1 Gigabit Port	100Mbps Port 1 Gigabit Port	1 Gigabit Port
Remote Login	128		128			128	128	128
Dimension	14.70in x 11.20in x 2.20in		14.80in x 11.20in x 2.20in			14.8in x 11.2in x 2.2in	12.8in x 10.0in x 2.2in	12.8in x 10.0in x 2.2in
Power	DC12V, 4A <15W (Without HDD)		DC12V, 4A, <15W (Without HDD)	DC12V, 5A <15W (Without HDD)		DC12V, 4A ≤15W (Without HDD)	DC12V, 2A 10W (Without HDD)	DC12V, 2A ≤10W(Without HDD)
Highlights	Penta-brid, Plug & Play, P2P, 5MP Resolution, Smart Search, IVS, Spot Output		Plug & Play, P2P, 4K Resolution, Smart Search, IVS, Spot Output			Smart Play, POS, P2P, Coaxial Upgrade, 2D/3DNR, UTP	Smart Search, Face Detection, Tripwire Analytics, Spot Output, P2P, Plug & Play, Penta-brid	Smart Play, POS, P2P, Coaxial Upgrade, 2D/3DNR



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