

Bosch has perfected the study of Imageology—the science of surveillance. The result is a complete range of professional IP security products that provide comprehensive integration and exceptional image quality for every application, every environment.

Complete solution from scene to screen



Bosch provides everything you need to capture, analyze, record and view standard definition, high definition and megapixel video.

Our IP cameras fit a wide range of surveillance requirements, and select models feature built-in infrared illumination for full and accurate video information even in complete darkness.

Bosch storage solutions are simple and scalable and allow for small and large amounts of data to be retrieved for fast playback. And, our video management systems are easy to use to reduce complexity and improve efficiency.

Open for third-party integration

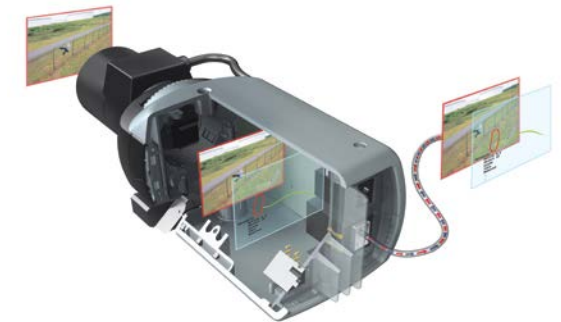


Bosch IP standard and high definition cameras, encoders and analytics integrate seamlessly with a wide range of security software offerings from Bosch and other industry providers.

Through ONVIF conformance and tools for custom integration, we make it easy to view, control and manage our video products within your system design.

You have the freedom to choose the products that best fit your needs. Visit our website for a list of supported software offerings.

Automated detection with video analytics



No matter how many cameras are in a system, monitoring everything is a serious challenge. Embedded in Bosch's IP cameras and encoders, Intelligent Video Analysis (IVA) automatically processes video signals and alerts operators to potential security risks.

Detection capabilities include loitering, trip-wire, idle object, object removed, trajectory, speed, size and color filters, and people counting.

Bosch IVA is completely self-contained and requires no PCs, servers or other software to function—providing a low cost per channel for advanced analytics.

IP Video Solutions

Advantage Line Megapixel



► Megapixel / HD

► Megapixel / HD IR



	NDC-284-PT	NDC-274-P	NDC-274-PT	NBC-265-P	NBC-265-W	NDC-265-P	NTC-265-PI	NDN-265-PIO
Camera Type	5MP Vandal-Resistant Microdome Camera	HD 1080p Indoor Microdome Camera	HD 1080p Vandal-Resistant Microdome Camera	HD 720p IP Camera 200 Series	HD 720p Wireless IP Camera 200 Series	HD 720p IP Dome Camera 200 Series	HD 720p Day/Night Infrared IP Bullet Camera	HD 720p Day/Night Infrared IP Dome Camera
Maximum Resolution	5 MP [2592 x 1944]	2 MP / HD 1080p [1920 x 1080]	2 MP / HD 1080p [1920 x 1080]	1 MP / HD 720p [1280 x 720]	1 MP / HD 720p [1280 x 720]	1 MP / HD 720p [1280 x 720]	1 MP / HD 720p [1280 x 720]	1 MP / HD 720p [1280 x 720]
Image Sensor Type	1/3.2" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/4" CMOS	1/4" CMOS	1/4" CMOS	1/4" CMOS	1/4" CMOS
Day/Night	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
IR Sensitive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Wide Dynamic Range [WDR]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Video Motion Detection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Privacy Masking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lens	3.74 mm	4.37 mm	4.37 mm	2.8 – 12 mm Varifocal	2.8 – 12 mm Varifocal	2.7 – 9 mm DC Iris	2.7 – 9 mm DC iris	2.7 – 9 mm DC iris
Zoom	–	–	–	–	–	–	–	–
Minimum Illumination [day mode]	0.3 lux	0.3 lux	0.3 lux	1.0 lux	1.0 lux	1.0 lux	1.0 lux [IR off]	1.0 lux [IR off]
Minimum Illumination [night mode]	–	–	–	–	–	–	0 lux [IR on]	0 lux [IR on]
Compression / Multistreaming	H.264 Tri-streaming *	H.264 Tri-streaming *	H.264 Tri-streaming *	H.264 Tri-streaming *	H.264 Tri-streaming *	H.264 Tri-streaming *	H.264 Tri-streaming *	H.264 Tri-streaming *
Max. Images Per Second [IPS] Color	12 @ 5 MP	30 @ 1080p	30 @ 1080p	30 @ 720p	30 @ VGA	30 @ 720p	30 @ 720p	30 @ 720p
Alarm Input / Output	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1/1	1/1	1/1	1/1	1/1
Audio / Audio Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Power Over Ethernet [PoE]	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Max. Power Consumption	3.9W	3.9W	3.9W	3.36W	3.36W	4.1W	6.7W	6.72W
Operating Temp. [indoor]	–4° to 122° F (–20° to 50° C)	–4° to 122° F (–20° to 50° C)	–4° to 122° F (–20° to 50° C)	32° to 122° F (0° to 50° C)	32° to 113° F (0° to 45° C)	14° to 122° F (–10° to 50° C)	–4° to 122° F (–20° to 50° C)	–4° to 122° F (–20° to 50° C)
Operating Temp. [outdoor]	–4° to 122° F (–20° to 50° C)	–	–4° to 122° F (–20° to 50° C)	–	–	14° to 122° F (–10° to 50° C)	–4° to 122° F (–20° to 50° C)	–4° to 122° F (–20° to 50° C)
SD Card Slot	microSD Card Up to 2 TB	microSD Card Up to 2 TB	microSD Card Up to 2 TB	SD Card Up to 32 GB	SD Card Up to 32 GB	microSD Card Up to 32 GB	–	microSD Card Up to 32 GB
Vandal Resistant	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
All-weather Rating	IP66	–	IP66	–	–	–	IP66	IP66
Integrated Infrared	–	–	–	–	–	–	32 LEDs @ 850 nm	15 LEDs @ 850 nm
Night Vision Maximum Range	–	–	–	–	–	–	82 ft	50 ft

* Two [2] H.264 streams with one [1] M-JPEG stream.

IP Video Solutions

Advantage Line



	▶ SD			▶ IR			
							
	NBC-255-P	NBC-255-W	NBC-225-P	NDC-255-P	NDC-225-P	NTC-255-PI	NDC-225-PI
Camera Type	IP Camera 200 Series	Wireless IP Camera 200 Series	IP Camera 200 Series	IP Dome Camera 200 Series	IP Dome Camera 200 Series	Day/Night Infrared IP Bullet Camera	Infrared IP Dome Camera 200 Series
Maximum Resolution	VGA [640 x 480]	VGA [640 x 480]	VGA [640 x 480]	VGA [640 x 480]	VGA [640 x 480]	VGA [640 x 480]	VGA [640 x 480]
Image Sensor Type	1/4" CMOS	1/4" CMOS	1/4" CMOS	1/4" CMOS	1/4" CMOS	1/4" CMOS	1/4" CMOS
Day/Night	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
IR Sensitive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Wide Dynamic Range [WDR]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Video Motion Detection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Privacy Masking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lens	2.8 – 10 mm DC iris	2.8 – 10 mm Varifocal	4 mm	2.8 – 10 mm DC Iris	4 mm	3.7 – 10 mm DC Iris	4 mm
Zoom	-	-	-	-	-	-	-
Minimum Illumination [day mode]	1.0 lux	1.0 lux	1.0 lux	1.0 lux	1.0 lux	1.0 lux [IR off]	1.0 lux
Minimum Illumination [night mode]	-	-	-	-	-	0 lux [IR on]	0 lux [IR on]
Compression / Multistreaming	H.264 Tri-streaming *	H.264 Tri-streaming *	H.264 Tri-streaming *	H.264 Tri-streaming *	H.264 Tri-streaming *	H.264 Tri-streaming *	H.264 Tri-streaming *
Max. Images Per Second [IPS] Color	30 @ VGA	30 @ VGA	30 @ VGA	30 @ VGA	30 @ VGA	30 @ VGA	30 @ VGA
Alarm Input / Output	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Audio / Audio Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Power Over Ethernet [PoE]	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Max. Power Consumption	3.36W	3.36W	3.36W	4.1W	4.1W	6W	6.6W
Operating Temp. [indoor]	32° to 122° F (0° to 50° C)	32° to 113° F (0° to 45° C)	32° to 122° F (0° to 50° C)	14° to 122° F (-10° to 50° C)	14° to 122° F (-10° to 50° C)	-4° to 131° F (-20° to 55° C)	14° to 113° F (-10° to 45° C)
Operating Temp. [outdoor]	-	-	-	-	-	-4° to 131° F (-20° to 55° C)	-
SD Card Slot	SD Card Up to 32 GB	SD Card Up to 32 GB	SD Card Up to 32 GB	SD Card Up to 32 GB	SD Card Up to 32 GB	-	SD Card Up to 32 GB
Vandal Resistant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All-weather Rating	-	-	-	-	-	IP66	-
Integrated Infrared	-	-	-	-	-	32 LEDs @ 850 nm	32 LEDs @ 940 nm
Night Vision Maximum Range	-	-	-	-	-	82 ft	50 ft

* Two [2] H.264 streams with one [1] M-JPEG stream.

IP Video Solutions

DINION Series



▶ Megapixel / HD

▶ SD



	NBN-932V	NBN-832V	NBN-733V	NBN-498	NBC-455
Camera Type	DINION HD 1080p HDR	DINION HD 1080p Day/Night	DINION starlight HD 720p60	DINION 2X Day/Night IP Camera	DINION IP Camera
Maximum Resolution	2 MP / HD 1080p [1920 x 1080]	2 MP / HD 1080p [1920 x 1080]	1 MP / HD 720p [1280 x 720]	4CIF [704 x 480]	4CIF [704 x 480]
Image Sensor Type	1/3" CMOS, Progressive Scan	1/2.7" CMOS, Progressive Scan	1/3" CMOS, Progressive Scan	1/3" CCD, Progressive Scan	1/3" CCD, Progressive Scan
Content-based Imaging Technology (CBIT)	■	■	■	□	□
Day/Night	■	■	■	■	■ [Electronic D/N]
IR Sensitive	■	■	■	■	□
Wide Dynamic Range [WDR]	■	□	■	■	□
Video Motion Detection	■	■	■	■	■
Privacy Masking	■	■	■	■	■
Auto Black	□	□	□	■	■
Intelligent Video Analysis [IVA]	■	■	■	■	■
Auto Back Focus	■	■	■	□	□
Lens	C/CS	C/CS	C/CS	C/CS	C/CS
Zoom	-	-	-	-	-
Minimum Illumination [day mode]	0.25 lux	0.22 lux	0.017 lux	0.15 lux	0.3 lux
Minimum Illumination [night mode]	0.08 lux	0.05 lux	0.0057 lux	0.06 lux	0.12 lux
Compression / Multistreaming	H.264 Quad-streaming **	H.264 Quad-streaming **	H.264 Quad-streaming **	H.264 Tri-streaming *	H.264 Tri-streaming *
Max. Images Per Second [IPS] Color	30 @ 1080p	30 @ 1080p	60 @ 720p	30 @ 4CIF	30 @ 4CIF
Alarm Input / Output	2/1	2/1	2/1	2/1	2/1
Audio / Audio Alarm	■	■	■	■	■
Power Over Ethernet [PoE]	■	■	■	■	■
Max. Power Consumption	4.8W - 7.2W	4.8W - 8.4W	6W	6.6W - 9.6W	6W
Operating Temp. [indoor]	-4° to 122° F (-20° to 50° C)	-4° to 131° F (-20° to 55° C)	-4° to 122° F (-20° to 50° C)	-4° to 122° F (-20° to 50° C)	-4° to 122° F (-20° to 50° C)
Operating Temp. [outdoor]	-	-	-	-	-
SD Card Slot	microSD Card Up to 2 TB	microSD Card Up to 2 TB	microSD Card Up to 2 TB	microSD Card Up to 32 GB	microSD Card Up to 32 GB
Vandal Resistant	□	□	□	□	□
All-weather Rating	-	-	-	-	-
Integrated Infrared	-	-	-	-	-
Night Vision Maximum Range	-	-	-	-	-

* Two [2] H.264 streams with one [1] M-JPEG stream.

** Three [3] H.264 streams (720p HD, downscaled resolution, and HD I-frame only) with one [1] M-JPEG stream.

IP Video Solutions

FLEXIDOME Series



	▶ Megapixel / HD						▶ SD	
								
	NDN-932	NIN-932	NDN-832	NIN-832	NDN-733	NIN-733	NDN-498	NDC-455
Camera Type	FLEXIDOME HD 1080p HDR RD	FLEXIDOME HD 1080p HDR VR	FLEXIDOME HD 1080p Day/Night IP Camera	FLEXIDOME HD 1080p HDR VR	FLEXIDOME starlight HD 720p60 RD	FLEXIDOME starlight HD 720p60 VR	FLEXIDOME 2X Day/Night IP Camera	FLEXIDOME IP Camera
Maximum Resolution	2 MP / HD 1080p [1920 x 1080]	2 MP / HD 1080p [1920 x 1080]	2 MP / HD 1080p [1920 x 1080]	2 MP / HD 1080p [1920 x 1080]	1 MP / HD 720p [1280 x 720]	1 MP / HD 720p [1280 x 720]	4CIF [704 x 480]	4CIF [704 x 480]
Image Sensor Type	1/3" CMOS, Progressive Scan	1/3" CMOS, Progressive Scan	1/2.7" CMOS, Progressive Scan	1/2.7" CMOS, Progressive Scan	1/3" CMOS, Progressive Scan	1/3" CMOS, Progressive Scan	1/3" CCD, Progressive Scan	1/3" CCD, Progressive Scan
Content-based Imaging Technology (CBIT)	■	■	■	■	■	■	□	□
Day/Night	■	■	■	■	■	■	■	■ [Electronic D/N]
IR Sensitive	■	■	■	■	■	■	■	□
Wide Dynamic Range [WDR]	■	■	□	■	■	■	□	□
Video Motion Detection	■	■	■	■	■	■	■	■
Privacy Masking	■	■	■	■	■	■	■	■
Auto Black	□	□	□	□	□	□	■	■
Intelligent Video Analysis [IVA]	■	■	■	■	■	■	■	■
Auto Back Focus	■	■	■	■	■	■	□	□
Lens	1.8 – 3 mm 3.8 – 13 mm 9 – 40 mm	3 – 9 mm 10 – 23 mm	1.8 – 3 mm 3.8 – 13 mm 9 – 40 mm	3 – 9 mm 10 – 23 mm	1.8 – 3 mm 3.8 – 13 mm 9 – 40 mm	3 – 9 mm 10 – 23 mm	2.8 – 10 mm 9.0 – 22 mm 6.0 – 50 mm	2.8 – 10 mm 9.0 – 22 mm
Zoom	Local zoom for installation	Remote zoom for installation	Local zoom for installation	Remote zoom for installation	Local zoom for installation	Remote zoom for installation	Local zoom for installation	–
Minimum Illumination [day mode]	0.25 lux	0.25 lux	0.5 lux	0.22 lux	0.017 lux	0.017 lux	0.28 lux	0.3 lux
Minimum Illumination [night mode]	0.08 lux	0.08 lux	0.08 lux	0.05 lux	0.0057 lux	0.0057 lux	0.099 lux	0.12 lux
Compression / Multistreaming	H.264 Quad-streaming **	H.264 Quad-streaming **	H.264 Quad-streaming **	H.264 Quad-streaming **	H.264 Quad-streaming **	H.264 Quad-streaming **	H.264 Tri-streaming *	H.264 Tri-streaming *
Max. Images Per Second [IPS] Color	30 @1080p	30 @1080p	30 @1080p	30 @1080p	60 @720p	60 @720p	30 @ 4CIF	30 @ 4CIF
Alarm Input / Output	2/1	2/1	2/1		2/1	2/1	2/1	2/1
Audio / Audio Alarm	■	■	■		■	■	■	■
Power Over Ethernet [PoE]	■	■	■		■	■	■	■
Max. Power Consumption	4.8W - 12.2W	7.2 W	9.6W - 16.8W	7.2 W	12W	7.2 W	6.6W - 9.6W	6W - 9.6W
Operating Temp. [indoor]	–	–	–	–	–	–	–	–
Operating Temp. [outdoor]	–58° to 122° F [IVA] (–50° to 50° C)	–22° to 122° F (–30° to 50° C)	–58° to 122° F [IVA] (–50° to 50° C)	–22° to 122° F (–30° to 50° C)	–58° to 122° F [IVA] (–50° to 50° C)	–22° to 122° F (–30° to 50° C)	–58° to 122° F (–50° to 50° C)	–58° to 122° F (–50° to 50° C)
	–58° to 131° F [Non-IVA] (–50° to 55° C)		–58° to 131° F [Non-IVA] (–50° to 55° C)		–58° to 131° F [Non-IVA] (–50° to 55° C)			
SD Card Slot	microSD Card Up to 2 TB	microSD Card Up to 2 TB	microSD Card Up to 2 TB	microSD Card Up to 2 TB	microSD Card Up to 2 TB	microSD Card Up to 2 TB	microSD Card Up to 32 GB	microSD Card Up to 32 GB
Vandal Resistant	■	■	■	■	■	■	■	■
All-weather Rating	IP 66 / NEMA 4X	IP 66 / NEMA 4X	IP 66 / NEMA 4X	IP 66 / NEMA 4X	IP 66 / NEMA 4X	IP 66 / NEMA 4X	IP 66 / NEMA 4X	IP 66 / NEMA 4X
Integrated Infrared	–	–	–	–	–	–	–	–
Night Vision Maximum Range	–	–	–	–	–	–	–	–

* Two [2] H.264 streams with one [1] M-JPEG stream.

** Three [3] H.264 streams (720p HD, downscaled resolution, and HD I-frame only) with one [1] M-JPEG stream.

IP Video Solutions

AutoDome and MIC Series



	▶ Megapixel				▶ SD			
								
	VG5-836	VJR-821	VJR-F801	VG5-7xx	VEZ-211	MIC-550AL §	MIC-550IR §	MIC-612 §
Camera Type	AutoDome 800 Series HD PTZ	AutoDome Junior HD PTZ	AutoDome Junior HD Fixed	AutoDome 700 Series IP PTZ	AutoDome Easy II IP PTZ	MIC Series 550 PTZ	MIC Series 550 Infrared PTZ	MIC 612 Thermal PTZ
Maximum Resolution	2 MP / HD 1080p [1920 x 1080]	2 MP / HD 1080p [1920 x 1080]	2 MP / HD 1080p [1920 x 1080]	4CIF [704 x 480]	4CIF [704 x 480]	4CIF [704 x 480]	4CIF [704 x 480]	4CIF [Optical] 320 / 640 TVL [Thermal]
Image Sensor Type	1/3" CMOS	1/2.5" CMOS, Progressive Scan	1/2.5" CMOS, Progressive Scan	1/4" CCD, Progressive Scan	1/4" CCD	1/4" CCD, Progressive Scan	1/4" CCD, Progressive Scan	1/4" CCD, Progressive Scan
Day/Night	■	■	■	■	□	■	■	■
IR Sensitive	■	■	■	■	□	■	■	■
Wide Dynamic Range [WDR]	□	■	□	■	■	□	□	□
Video Motion Detection	■	■	■	■	■	■	■	■
Privacy Masking	■	■	■	■	■	■	■	■
Auto Black	□	□	□	□	□	□	□	□
Intelligent Video Analysis [IVA]	■	■	■	■	■	□	□	□
Lens	4.7 – 94 mm	6.3 – 63 mm	6.3 – 63 mm	3.1 – 122.4 mm 3.5 – 98.0 mm	4.2 – 42.0 mm	3.5 – 98.0 mm [18x] 3.4 – 122.4 mm [36x]	3.5 – 98.0 mm [18x] 3.4 – 122.4 mm [36x]	3.4 – 122.4 mm [36x] 35 / 50 mm [Thermal]
Zoom	20x optical zoom 12x digital zoom	10x optical 16x digital	10x optical 16x digital	28x / 36x optical 12x digital	10x optical	28x / 36x optical 12x digital	28x / 36x optical 12x digital	36x optical 12x digital
Minimum Illumination [day mode]	0.8 lux [D/N]	1.2 lux	1.2 lux	0.66 lux [36x] 0.33 lux [28x]	1.0 lux	1.4 lux	1.4 lux	1.4 lux [36x]
Minimum Illumination [night mode]	0.12 lux [D/N]	0.06 lux	0.06 lux	0.104 lux [36x] 0.066 lux [28x]	–	0.01 lux	0 lux	0.01 lux [36x]
Compression / Multistreaming	H.264 Quad-streaming ***	H.264 Quad-streaming ***	H.264 Quad-streaming ***	H.264 Quad-streaming ***	H.264 Tri-streaming *	H.264 Quad-streaming **	H.264 Quad-streaming **	H.264 Quad-streaming **
Max. Images Per Second [IPS] Color	60 @ 720p 30 @ 1080p	60 @ 720p 30 @ 1080p	60 @ 720p 30 @ 1080p	30 @ 4CIF	30 @ 4CIF	30 @ 4CIF	30 @ 4CIF	30 @ 4CIF
Alarm Input / Output	2/1	2/1	2/1	2/1	2/1	1/2	1/2	1/2
Audio / Audio Alarm	■	■	■	■	□			
Power Over Ethernet [PoE]	□	■	■	□	■ [Indoor version]	□	□	□
Max. Power Consumption	19W / 55W [indoor / outdoor]	17W	14W	24W / 60W [indoor / outdoor]	12W / 27W [indoor / outdoor]	36W [+ 800 mA]	43W [+ 800 mA]	54W [with heater] [+ 800 mA]
Operating Temp. [indoor]	14° to 122° F (–10° to 50° C)	14° to 104° F (–10° to 40° C)	14° to 104° F (–10° to 40° C)	14° to 104° F (–10° to 40° C)	14° to 104° F (–10° to 40° C)	–40° to 140° F (–40° to 60° C)	–40° to 140° F (–40° to 60° C)	–40° to 140° F (–40° to 60° C)
Operating Temp. [outdoor]	–49° to 131° F (–45° to 55° C)	–	–	–40° to 122° F (–40° to 50° C)	–22° to 122° F (–30° to 50° C)	–40° to 140° F (–40° to 60° C)	–40° to 140° F (–40° to 60° C)	–40° to 140° F (–40° to 60° C)
SD Card Slot	□	□	□	□	□	■	■	■
Vandal Resistant	■	■	■	■	■ [indoor version]	■	■	■
All-weather Rating	IP66 / NEMA rated [pendant]	IP54	IP54	IP66 / NEMA rated [pendant]	IP65 / NEMA 4X [outdoor version]	IP68 IP67 [IP power supply]	IP68 IP67 [IP power supply]	IP68 / NEMA 6P IP67 [IP power supply]
Integrated Infrared	–	–	–	–	–	–	850 nm	–
Night Vision Maximum Range	–	–	–	–	–	–	492 ft (150 m)	2.4 miles (3.9 km)

* Two [2] H.264 streams with one [1] M-JPEG stream.

** Three [3] H.264 streams with one [1] M-JPEG stream. The third H.264 stream consists of HD I-frames only.





*** Three [3] H.264 streams with one [1] M-JPEG stream. During full bandwidth operation (1080p30) or high frame rate (720p60) the second stream is an exact copy of the first. In reduced bandwidth mode (720p30) the second is an independently configurable, downscaled-resolution stream. In both modes the third H.264 stream consists of HD I-frames only.

§ IP features are possible when using optional MIC-IP-PSU power supply with built-in encoder.

IP Video Solutions

Specialty Cameras



	► IR	► Thermal	► License Plate	► Vandal Resistant
				
	NEI-30	VOT-320	NER-L2	EX36-IP
Camera Type	DINION IP Infrared Imager	Thermal IP Camera	DINION capture 5000 IP	No-Grip Corner Mount Camera
Maximum Resolution	4CIF [704 x 480]	320 x 240	4CIF [704 x 480]	4CIF [704 x 480]
Image Sensor Type	1/3" CCD	Vanadium Oxide [VOx] focal plane array	1/3" CCD, Progressive Scan	1/3" CCD
Day/Night	■	□	■	Optional
IR Sensitive	■	■	■	Optional
Wide Dynamic Range [WDR]	■	□	□	□
Video Motion Detection	■	■	■	■
Privacy Masking	□	□	□	□
Auto Black	■	□	■	□
Intelligent Video Analysis [IVA]	■	■	□	■
Lens	5 – 50 mm Auto-iris	9, 13, 19 or 60 mm	5 – 50 mm Varifocal	2.5 mm 3.6 mm
Zoom	–	–	–	–
Minimum Illumination [day mode]	0.047 lux [Color]	0 lux	0 lux	2.7 lux [Color]
Minimum Illumination [night mode]	0 lux	–	0 lux	0 lux
Compression / Multistreaming	H.264 Tri-streaming *	H.264 Tri-streaming *	H.264 Quad-streaming **	H.264 Tri-streaming *
Max. Images Per Second [IPS] Color	30 @ 4CIF [MPEG-4] 15 @ 2CIF [H.264]	8.33 / 30	30 @ 4CIF	30 @ 4CIF [MPEG-4] 15 @ 2CIF [H.264]
Alarm Input / Output	□	2/2	□	□
Audio / Audio Alarm	□	□	□	□
Power Over Ethernet [PoE]	■	■	■	□
Max. Power Consumption	35W	37.2W	13 – 22W	11W [with IR]
Operating Temp. [indoor]	–40° to 122° F (–40° to 50° C)	–58° to 131° F (–50° to 55° C)	–40° to 122° F (–40° to 50° C)	–58° to 122° F (–50° to 50° C)
Operating Temp. [outdoor]	–40° to 122° F (–40° to 50° C)	–58° to 131° F (–50° to 55° C)	–40° to 122° F (–40° to 50° C)	–
SD Card Slot	□	□	□	□
Vandal Resistant	□	■	□	■
All-weather Rating	IP67 / NEMA 4X	IP 66 / NEMA 4	IP 67, NEMA 4X	–
Integrated Infrared	850 nm or 940 nm	–	850 nm	850 nm or 940 nm
Night Vision Maximum Range	525 ft (160 m) @ 850 nm	12,795 ft (3.9 km)	12.5 – 92 ft (3.8 – 28 m)	30 ft (9 m) @ 850 nm

* Two [2] H.264 streams with one [1] M-JPEG stream.

** Three [3] H.264 streams (720p HD, downscaled resolution, and HD I-frame only) with one [1] M-JPEG stream.

IP Video Solutions

Digital Recording

► Network Recording

► Mid Range



BRS HD Series

	Target System Size	10,000+ Cameras
	Operating System	Windows 7
	Rack Mountable	■
	SDK Available	■ [VSDK v5.x]
Video	Input	
	Channels	Up to 64
	Output	
	Looping Video	-
	Composite Outs	0
	VGA	1 DVI, 1 DP [Tower Model]
	Spot Monitor	0
Audio	Input / Output Channels	Up to 64 [audio playback via remote station only]
	Compression Type	G.726
	Synchronous Audio	■
	Associate Multiple Cameras to 1 Audio	■
Alarms	Inputs	Up to 144 via ADAM I/O modules [+1 per IP camera]
		VGA
		[1920 x 1080]
		[640 x 480]
		■
		■
		■
		■
		■
		■
		■
Recording	Video Compression	H.264, MPEG-4, JPEG
	Frame Rate [IPS] - NTSC	Up to 1250 IPS @ 1080p*
	IPS Per Camera - NTSC	30 IPS @ 1080p
	Supported Resolutions	CIF/2CIF/4CIF/720p/1080p/3MP
	Individual Camera Adjustment	■ [IPS & Quality]
	Schedule Recording Modes	Day / Night / Weekend / Holiday / Specific Day
Storage	Internal HDD [GB]	1000 - 4000 - 8000 - 16000 GB
	On-board RAID	■ [on rackmount models]
	External Storage	■ [Direct Attached SCSI]
	Export	
	Supported Devices	Internal CD/DVD Writer***, USB 2.0, Network Drive, DAS SCSI
	Data Format	Native, ASF
	Back-up Mode	Manual or Automatic
Search	Timeline Search Bar [Color Coded]	■
	Search Mode	Date/time, Camera Name, Events, Pre-Alarm, Motion, Smart Motion Search
	Smart Motion Search	■
Display	Live Resolution [PAL/NTSC]	CIF / 2CIF / 4CIF / 720p / 1080p
	Screen Division [Multiscreen]	4:3: Full, 2x2, 3x3, 4x4, 5x6, 5+1, 7+1, 9+1, 12+1, 16+1, 8+2, 9+4 16:9: 2x3, 3x4, 2+1, 3+1, 4+2, 6+2, 6+3
Security	User Control	
	User Levels	Unlimited
	Camera Lockouts by User	■
	Set Viewing Permissions	■
	Data Integrity Check (e.g. Watermarking)	■
Remote Access	Network	10/100/1000 Ethernet
	Web Browser Access	■
	Simultaneous Accessible Users	20 with software/5 with web browser
	Mobile Client	□
PC Client	Admin Control	■
	PTZ Control	■
	Export Options	Native File Format and ASF
Other	Instant Playback	■
	Digital Zoom [Live / Playback]	■ / ■
	PTZ Joystick Control	□
	ATM/POS Interface	■

IP Video Solutions

Digital Storage



► Network Attached Storage

► Small Range

► Mid Range









► Large Range







		DLA 1200 Series (AIOU0)	DLA 1400 Series (AIOLO)	DLA 1400 Series (AIOI1)	DLA 1400 Series (AIOXL1)	DSA-N2E6X2 Series
	Target System Size	1 to 64 Cameras	32 to 128 Cameras	32 to 128 Cameras	32 to 128 Cameras	128 Cameras and above
Mechanical	Form Factor	Mid-Tower	1U 19-inch Rack Mount	2U 19-inch Rack Mount	2U 19-inch Rack Mount	2U 19-inch Rack Mount
	System Weight	10.8 kg (23.80 lbs)	16.3 kg (36 lbs)	8 bay: 23.6 kg (52 lbs)	8 bay: 23.6 kg (52 lbs)	27 kg (60 lbs)
	Operating Temperature	10° to 35° C (50° to 95° F)	10° to 35° C (50° to 95° F)	10° to 35° C (50° to 95° F)	10° to 35° C (50° to 95° F)	10° to 40° C (50° to 104° F)
	Product Safety	CE, UL, EN, IEC	CE, UL, EN, IEC	CE, UL, EN, IEC	CE, UL, EN, IEC	EN 60950, CE, CSA 60950, UL 60950, others
Power Supplies	Warranty	3 Years [all components]	3 Years [all components]	3 Years [all components]	3 Years [all components]	3 Years [all components]
	Number	1	2	2	2	2
	Redundant	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Hot Swappable	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fans	Power Consumption	200W	4 bay: 230W	8 bay: 291W	8 bay: 291W	399W
	Number	1	3	5	5	2 redundant modules
Hot Swappable	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	System Processor	Type	Intel® Pentium G6950 Dual Core	Intel® Pentium G6950 Dual Core	Intel® Pentium G6950 Dual Core	Intel® Pentium G6950 Dual Core
Speed		2.8 GHz, 1333 MHz FSB	2.8 GHz, 1333 MHz FSB	2.8 GHz, 1333 MHz FSB	2.8 GHz, 1333 MHz FSB	800MHz LSISAS2116
	2 MP / HD 1080p	3MB L2 Cache	1 MP / HD 720p	VGA	3MB L2 Cache	32 kB Data Cache; 512 kB L2
Memory	Host Interface	4GB, DDR2-800 ECC RAM	4GB, DDR2-800 ECC RAM	4GB, DDR2-800 ECC RAM	4GB, DDR2-800 ECC RAM	2GB, DDR2 SDRAM VLP DIMM
	Type	Gigabit Ethernet	Gigabit Ethernet	Gigabit Ethernet	Gigabit Ethernet	1 GbE / 10 GbE
Number		2	2	2	2	2
	RAID Levels	JBOD / RAID-1	RAID-5	RAID-5	RAID-5	RAID-5 / RAID-6
Storage	Disk Drives	Type	SATA-II	SATA-II	SATA-II	SATA-II
	Maximum Drives Supported	4	4	8	8	12
Storage Expansion	Hot Swappable	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Available Capacities	1 TB	1 TB	1 TB	2 TB	2 TB
Capacity	Expansion Links	-	-	-	-	6Gb/s SAS [Copper]
	Number of Expansion Units	-	-	-	-	Up to 7 Expansion Shelves
Hot Swappable	Maximum Drives Supported	-	-	-	-	96
	Hot Swappable	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Base System [Raw]	Base System [RAID Config.]	4 TB	4 TB	8 TB	16 TB	12 TB
	Base System [RAID Config.]	3.6 TB [JBOD]	2.7 TB	6.4 TB	12.93 TB	20.482 TB [RAID-5] 18.620 TB [RAID-6]
Base System + Expansion [Raw]	Base System + Expansion [RAID-5 Config.]	-	-	-	-	192 TB
	Base System + Expansion [RAID-5 Config.]	-	-	-	-	164 TB
Performance	Array Throughput / Bandwidth	150 Mbps	200 Mbps	200 Mbps	200 Mbps	500 Mbps [Base]
	Drive Throughput	3.0 Gbps	3.0 Gbps	3.0 Gbps	3.0 Gbps	6.0 Gbps
	Max. iSCSI Camera Connections	32	64	64	64	400
	Max. iSCSI Replay Sessions	8	8	8	8	32
Monitoring	Remote Mgmt.	Remote Desktop	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Web Client	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Monitoring	SNMP Alerts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Alerts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Platform Support	Supported HW	Recorders	Divar 700 Series	Divar 700 Series	Divar 700 Series	Divar 700 Series
	Supported SW	Direct-to-iSCSI	Any Bosch IP device running FW v4.x or greater	Any Bosch IP device running FW v4.x or greater	Any Bosch IP device running FW v4.x or greater	Any Bosch IP device running FW v4.x or greater
Supported SW	BVC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	VIDOS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	BVMS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	VRM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

IP Video Solutions

Encoders and Decoders

		▶ Standard Encoders				▶ Decoders		▶ Transcoders	
									
		VIP-X1XF-E	VIP X1XF	VideoJet X20 XF E	VideoJet X40 XF E	VideoJet X16 XF E	VIP XDA	VIP-XDHD	VideoJet XTC XF
Description		Single Channel Video Encoder	Single Channel Premium Encoder	2 Channel H.264 Video Encoder	4 Channel H.264 Video Encoder	16 Channel H.264 Video Encoder	Single / Quad-stream Decoder	HD Video Decoder	4 Channel / Dual-stream Transcoder
Video / Audio	Camera Inputs	1	1	2	4	16	–	–	4
	Monitor Outputs	–	–	–	–	–	1/4 [single/quad]	1 of 3 [DVI-I,HDMI,DP]	–
	Video Codec	H.264	H.264	H.264 MP H.264 BP	H.264 MP H.264 BP	H.264 MP H.264 BP	H.264 BP MPEG-4 SH+ MPEG-2	H.264 MPEG-4	H.264 MP H.264 BP
	Frame Rate [IPS]	25/30 @ 4CIF	25/30 @ 4CIF	25/30	25/30	25/30 @ 4CIF	25/30 @ 4CIF	25/30 @ 1080p	25/30 @ 4CIF
	Audio In / Out	1 / 1	1 / 1	2 / 1	2 / 1	2 / 1	0 / 1	–	–
Storage	Type	SD Card	SD Card	CF	CF	□	–	–	CF
	Capacity	2 TB	2 TB	2 TB	2 TB	n/a	n/a	n/a	2 TB
Intelligence	Direct-to-SCSI	■	■	■	■	■	–	–	–
	Video Analytics	Motion+	IVA	Motion+	Motion+	Motion+	–	–	–
Interfaces	Alarm In	1	2	4	4	4	4	0	4
	Relay Out	1	2	1	1	1	4	0	1
	SFP Fiber Slot	□	□	□	□	□	□	□	□
Power over Ethernet [PoE]	□	□	□	□	□	□	□	□	

		▶ Modular Systems			
					
		VIP X1600-B	VIP X1600-XFB	VIP X1600 XFM4A	VIP X1600 XFM4B
Description		Base System	Base System	4 Channel H.264 Encoder Module	4 Channel H.264 Encoder Module with Bilinx
Bays		4	4		
Ethernet		Two 1 Gbps ports [1 front, 1 rear]	Three 1 Gbps ports [2 front, 1 rear]		
SFP Fiber Slot		□	■		
Video / Audio	Camera Inputs	4	4	4	4
	Monitor Outputs	–	–	–	–
	Video Codec	H.264 MP H.265 BP+ M-JPEG	H.264 MP H.265 BP+ M-JPEG	H.264 MP H.265 BP+ M-JPEG	H.264 MP H.265 BP+ M-JPEG
	Frame Rate [IPS]	25/30 @ 4CIF	25/30 @ 4CIF	25/30 @ 4CIF	25/30 @ 4CIF
	Audio In / Out	2/1	2/1	2/1	2/1
Storage	Type	–	–	–	–
	Capacity	–	–	–	–
Intelligence	Direct-to-SCSI	■	■	■	■
	Video Analytics	IVA	IVA	IVA	IVA
Interfaces	Alarm In	4	4	4	4
	Relay Out	1	1	1	1
	SFP Fiber Slot	■	■	■	■
	Power over	–	–	–	–

IP Video Solutions

Video Management Systems



▶ Video IP System Solution



		BVC [v1.4] / Rec@edge	BRS [v8.11] including Appliance	BVMS [v4.5] Lite	BVMS [v4.5] Pro
	Channel Count	Up to 128	Up to 64 per Station	32 - 64	8 to Unlimited
	System Architecture Support	Standalone	Standalone or Peer-to-Peer [200 max.]	Standalone to Client Server	Client Server (one server/2000 cameras)
	Full VMS	Advanced Viewing Client	Recorder + Viewing Client	Full VMS	Full VMS
	Software based Video IP Platform	■	■	■	■
	ONVIF for 3rd Party Camera Intergration	■ [with VRM2.30/VSG1]	■ [with v8.10]	■	■
	Multi-site Support [independent systems tied together]	□	■ [via VPN tunnelled connection]	■	■
	Multi-site Support [dispersed system recording, cameras, remote independent client]	□	Independent Client with VPN or via Web, one site at a time	■	■
	Mobile Clients	□	□	■ MVS Licence required max 20 connection per site	■ MVS Licence required max 20 connection per site
	Workstations / Clients	1 standalone at a time [separate config needed]	5 web connections, 20 clients	2 clients for 32; 4 clients for 64	100 for Client-Server and Multi-Server environments
	LDAP	□	■	■	■
	COTS [Commercial off the Shelf] for Server / Workstation	■	■	■	■
Resolution	HD-ready	■	■	■	■
	SD and HD	■	■	■	■
	SD and HD Decoder support	■	□	■	■
	Monitor Wall Client GUI Support	■	□	■	■
Encoding	H.264	■	■	■	■
	MPEG-4	■	■	■ [via BRS only]	■ [via BRS only]
	3rd party camera support	ONVIF 1.02/Profile-S with DLA	AXIS MPEG-4 [No PTZ]; ONVIF 1.02/Profile-S	■ ONVIF 1.02/Profile-S	■ ONVIF 1.02/Profile-S
	H.264 and MPEG-4 & HD Decoder support	H.264, MPEG-4	□	H.264, MPEG-4	H.264, MPEG-4
Display	Multi-monitor support	■ 2	■ [via browser or BVC]	■ 4	■ 4
	Workstation OS support	XP, Vista, Win7, SP1	Win XP SP3 [32-bit]; Win7 [32/64-bit]	XP, Win7, SP1	XP, Win7, SP1
	16:9 Monitor support	■	■	■	■
	Mapping	□	□	■	■
	Dynamic cameo scaling	■	□	□	□
Alarm Management	User management	□	■	■	■
	Digital I/O alarms	■	■	■	■
	System event alarms	■	■	■	■
	Motion alarms	■	■	■	■
	Event response and command scripts	□	■	■	■
	IVA alarms	■	■	■	■
	IVA forensics	■	□	■	■
	Audio	■	■	■	■
Control	AutoDome Intelligent Tracking	■	□	□	□
	PTZ	■	■	■	■
	IntuiKey	■ [limited functionality]	■ [via BVC only]	■	■
	Virtual matrix	□	□	■	■
Storage	@edge camera support	■	□	■	■
	iSCSI	■	□	■	■
	NVR support	□	■	■ [BRS, VIDOS]	■ [BVMS Appliance BRS, VIDOS]
	VRM	■ [via DLA]	□	■ [via DLA]	■
	IVA metadata	■	□	■	■
	Failover / recording	□	□	□	■
	DLA Support [VRM Mode]	■ 1	□	■ 5	■ 40
Integration	BVMS	□	■	■	■
	BRS	■	■	■	■
	DxR 400/600/700	■	□	■	■
	BVC	■	■	□	□
	Bosch G Series panel	□	■	□	□
	Access	□	■	■	■
	OPC	□	■	■	■
	CLI / CCL	□	■	■	■
	ATM / POS	□	■	■	■
Networking	LAN/intranet	■	■	■	■
	WAN	□	■ [via hardware VPN]	■	■
	Remote/Decoupled Client	□	■	■	■
	Mobile Viewing APP	□	■	■ [Apple only]	■ [Apple only]
	Web Client	□	■	■	■

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