

Canon



Keep every
angle covered

Capture everything with
Canon Network Cameras

come

and

see

●

Ensure your business is completely covered

Where surveillance really matters, Canon's range of network cameras offer a solution to cover every angle. Compact, yet big on performance, they deliver a wide field of vision and outstanding image quality, even in low light where security risks are heightened. Thanks to over 70 years of imaging expertise, you can expect the finest details to be captured, recorded and usable – keeping your interests well protected and providing real-time management information.

Our heritage

When Canon was formed back in 1937, its founders set out a clear vision: to create the best cameras in the world. Today, this imaging ethos and an uncompromising commitment to innovation has kept us at the forefront of camera technology.

This expertise has enabled us to create network cameras that offer outstanding image quality, with a range designed to protect businesses from undesirable threats, even in the harshest environmental conditions.

Innovation that sets us apart

We set out to design cameras that deliver superior performance in the areas that matter most in the surveillance marketplace. Firstly, to offer outstanding image resolution. Secondly, to provide unbeatable low-light performance.

Lastly, to deliver the widest possible angle of view. These aims have been comprehensively addressed and underpin our entire network camera range.



Match your exacting requirements

Whether you're a systems integrator, consultant, or corporate security specialist, Canon offers a diverse portfolio of network cameras designed to make system design, tender specification, and your life, simpler. These include protected models with IK10 vandal resistance, NEMA Type 4X environmental protection and IEC 60950-1/22 compliance, as well as cameras offering great low light performance.



PTZ Cameras

Monitor expansive areas and follow subjects easily with our cameras' Pan, Tilt and Zoom (PTZ) capabilities, which include continuous 360° rotation, Auto-flip and Intelligent Auto-tracking. Ideal for traffic management and city surveillance applications.

Dome Cameras

Our Dome cameras prove that surveillance can also be discrete. Compact, vandal resistant to IK10 and aesthetically pleasing, they're perfect for indoor and outdoor environments. Many feature IR corrected lenses to help keep accurate focus day and night when used with IR illumination.

Box Cameras

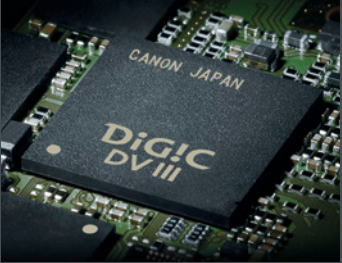
Whether wall or ceiling mounted our Box cameras are built to fit a diversity of security applications and are easy to install. Indoors or out, you can enjoy wide viewing angles, IP66 weatherproofing or even inbuilt LEDs.

Protected cameras

Robust and durable cameras with IP66 weatherproofing plus NEMA250 Type4X and IEC 60950-1/22 environmental protection for high quality surveillance in all weathers and extreme temperatures.

Innovation that helps keep you informed

Our range of network cameras inherits the renowned technological innovations that reside within our professional cinema cameras. This means proven, high-quality image processing and lens technology, designed to keep you informed.



High definition DIGIC processing

Dual image and network processors – DIGIC DV III and DIGIC NET II – enable seamless capturing, processing, encoding and transmitting of images. The DIGIC DV III engine – also used in Canon’s Cinema EOS professional movie cameras – provides exceptional video quality, low noise, smooth gradations plus vivid and accurate colour reproduction – especially in low light conditions.

While the high performance DIGIC NET II engine allows simultaneous delivery of 2x H.264 video streams in variable frame rates for the added advantage of monitoring and recording at different resolutions.



Standard wide-angle lens



High-performance lens with minimal distortion

Renowned lens technology

Thanks to Canon’s optical technology, our lenses deliver more light to the cameras sensors – achieving brighter and better defined images.

They include High UD (High Ultra Low-Dispersion) lenses, which counteract the chromatic aberration that can occur with a powerful zoom lens lenses for clean sharp images day or night and improved low light performance and Super UD (Super Ultra Low-Dispersion) lenses that provide clean sharp focus under both visible and infrared light.

Many lenses also incorporate IR correction, which provides clean sharp monochrome images, when used in conjunction with IR illumination.



CMOS Sensor

Our cameras use optimised video processing and a high sensitivity CMOS sensor – the result of Canon’s renowned heritage in imaging. This ensures sharp images with low noise in all lighting conditions.



ADSR

ADSR (Area-specific Data Size Reduction) improves bandwidth control and enables operators to freely define up to eight discrete areas of the scene where the best quality imaging is needed. A higher level of compression (and lower picture quality) is applied to the less important surrounding areas.

See everything
with ease

Canon network security cameras offer a suite of capabilities that make surveillance a proactive affair. Real-time image adjustment, multi streaming, and sophisticated video analytics that diligently monitor and flag-up security breaches, ensure images translate into powerful evidence.



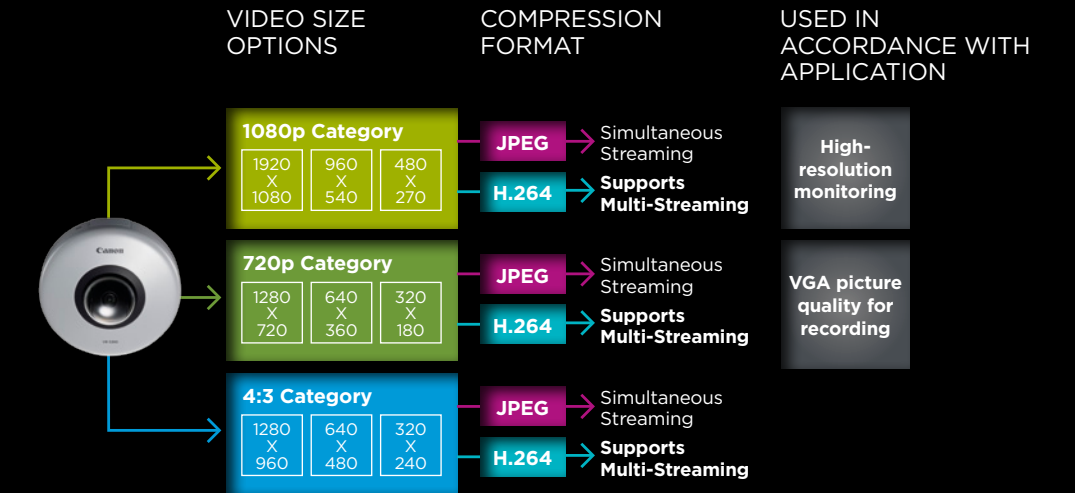
Auto Smart Shade Control

Where competitor cameras take a sequence of images at different shutter speeds and combine them into one to resolve scenes containing brightly lit backgrounds, Canon's Auto Smart Shade Control (Auto SSC) makes instant real-time adjustments for improving the visibility of foreground image. The net effect is that bright areas stay bright and only the darker areas are lightened, so hard-to-see silhouettes are instantly converted into clearly identifiable objects.

H.264

Multistreaming

The processing power of DIGIC NET II enables delivery of dual H.264 video streams at different resolutions to provide greater flexibility in monitoring and recording. This allows for prioritising between monitoring in high resolution and recording in a lower resolution.



AUTO SSC

SSC



The face is difficult to see owing to backlight

Can be set manually at seven different levels of correction strength and set for exposure compensation

Level of exposure is adjusted automatically to deliver clear images

Brightness and other

**SSC strength level (1-7)
and exposure are adjusted
manually by the user**



Optimises exposure to keep background and foreground clear, even in changing light conditions

SSC of



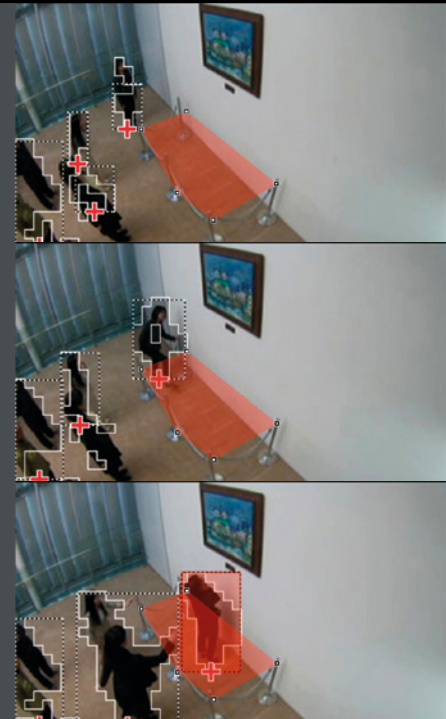
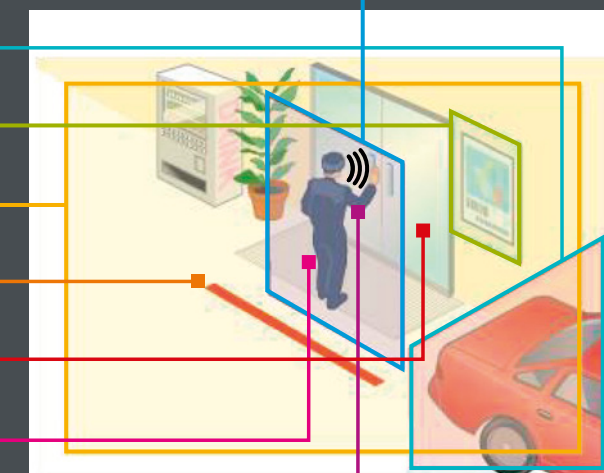
SSC on



Intelligent Functions

Intelligent analytics allow for realtime analysis of potential security breaches. Up to 15 areas in a scene can be designated for detection using 8 different algorithms, which include Intruder and Scream detection. This redefines traditional alarm detection methods by helping to reduce false alarms, increase efficiency, and reduce the storage needed, by only triggering the recording of genuine threats. The Linked Events function enables alarms to be logically combined to provide conditional alarm triggers.

1. Moving Object Detection
2. Abandoned Object Detection
3. Removed Object Detection
4. Camera Tamper Detection
5. Passing Detection
6. Volume Detection
7. Intruder Detection
8. Scream Detection



Advanced technology for extended security

An innovative range of advanced image quality and detection features plus reliable outdoor operation in all weathers and extreme temperatures offer you even more extensive security.

Precise and accurate 360° speed domes

Our 360° speed domes allow operators to easily perform complex tracking manoeuvres whilst monitoring and recording high quality images. Continuous 360° panning at 450°/s and Auto-Flip lets them keep subjects in view without changing their handling perspective, while intelligent Auto-Tracking lets them attain and track their target virtually hands-free.

Haze compensation

Haze Compensation adjusts image contrast to make environments with fog, haze or smog easier to see. It can also bring distant scenes captured at high zoom into clearer view. Compensation can be set to Auto with a choice of Strong, Medium or Mild compensation. Levels can also be set manually for optimal results.



Intruder detection

Activating the intruder detection function can alert operators and trigger recording when intruders enter areas that are out of bounds. This intelligent function detects a moving object within a specified area that remains there for longer than a specified time period. Users can configure the intruder alert based on both the minimum moving object size and the time spent in the detection area.

Scream detection

Scream detection triggers an alarm when screams or yelling are detected in a generally quiet environment. The camera calculates the likelihood that a sound is a scream or yell by comparing its characteristics to an acoustic model from a database of sounds.



Extreme temperature and harsh environment surveillance

Canon's innovative range of protected cameras delivers high quality surveillance in all weathers and under the harshest of conditions. They can reliably operate in temperatures as low as -50°C thanks to a built in heater, and function equally efficiently in temperatures up to + 55°C, such as in hot tropical and arid regions.

They offer IK10 shock resistance certification and IP66 certification for extensive weatherproofing, while their robust construction and innovative design provides NEMA Type 4X environmental protection and IEC 60950-1/22 compliance – making them ideal for use in coastal areas subject to salt damage and in corrosive industrial sites.



Understanding the specific needs of the security marketplace and where Canon's imaging expertise can be of benefit has been our key priority. This has resulted in a range of network cameras that offer a powerful and unique combination of features.

We've considered every angle

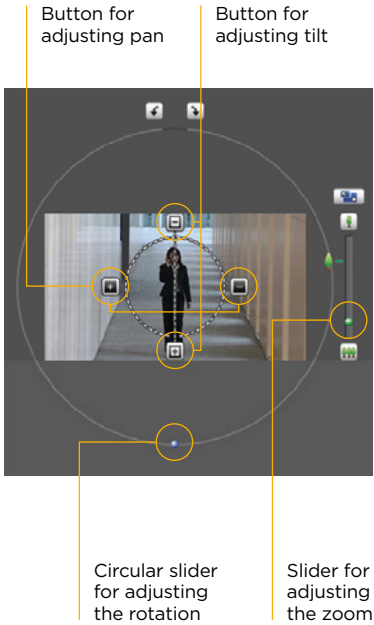
Stunning image quality

Our network security cameras allow you to enjoy fine, highly detailed images in Full HD resolution thanks to Canon's renowned DIGIC DV III image processor, originally developed for our professional video cameras. This processor delivers resolution at up to 1080p in 30fps and Canon's renowned colour reproduction.



PTRZ Installation

Once physically installed and connected to a network, the camera's position and angle of view can be electronically adjusted with the Camera Angle Setting Tool. The camera's direction can be changed intuitively by pressing the pan/tilt buttons, rotation sliders and the zoom slider that appear on the adjustment window. This enables just one person to complete the configuration, saving both time and money.



Class-leading low-light performance

Considering the importance of recognition ability for surveillance cameras, low-light performance and colour reproduction have been particularly enhanced in our cameras. As a result – while striking a balance across noise, resolution and colour reproduction – our cameras can deliver a usable colour even in low-light situations. In certain conditions, this can be further enhanced by enabling Auto SSC.

Wide viewing angles

A wide viewing angle makes the surveillance of large areas possible with fewer cameras. And thanks to Canon's optic technology, our lenses deliver more light to the cameras' sensors – achieving brighter, well-defined images. Traditional wide angle distortion is reduced by optimally arranging high quality aspherical lens elements, minimising the fish-eye effect.



“Canon has supported us in many ways – not only with its high quality cameras, but also with its excellent levels of post-sale support.”

Bhanu Goud,
Security Systems Manager,
The British Library

The British Library protects its valuable collection

Migrating to Canon's versatile network cameras makes significant quality improvements and cost savings.

Background and challenges

As the 2nd largest library in the world, the British Library holds manuscripts, sound recordings, drawings, and millions of books. Its 20 year old surveillance system suffered from many problems: different day and night models, limited zoom, and a lack of analytical tools needed to protect it from acts of terrorism and vandalism.

Canon solution

Over one hundred VB-H610Ds have become the library's new standard, due to their Full HD resolution, rich feature set and wide angle of view. Despite the British Library's architectural challenges, the VB-H610D's optical zoom lens technology makes it possible to capture an image and zoom in up to three times, maintaining image quality.

To help protect its most valuable books in the reading rooms, the surveillance system is to be further enhanced by introducing the Canon VB-H41. This Full HD Pan-Tilt-Zoom (PTZ) camera with its 20x optical zoom provides an advanced level of monitoring, enabling the security team to quickly identify any potential threats of theft or damage, while causing minimum disruption to the visitors.

Results

The British Library now has a far wider coverage area than was possible with the analogue cameras previously installed. With fewer cameras covering a larger space, the library saved approximately £250,000 in camera costs and associated installation charges.



Working in partnership

Whether you're a system integrator, distributor, consultant or an end user, rest assured that Canon is committed to delivering integration with your preferred surveillance solution.



Integration solutions

As a result of a worldwide integration programme, our network cameras are compatible with a wide and growing number of third party VMS and NVR solutions.

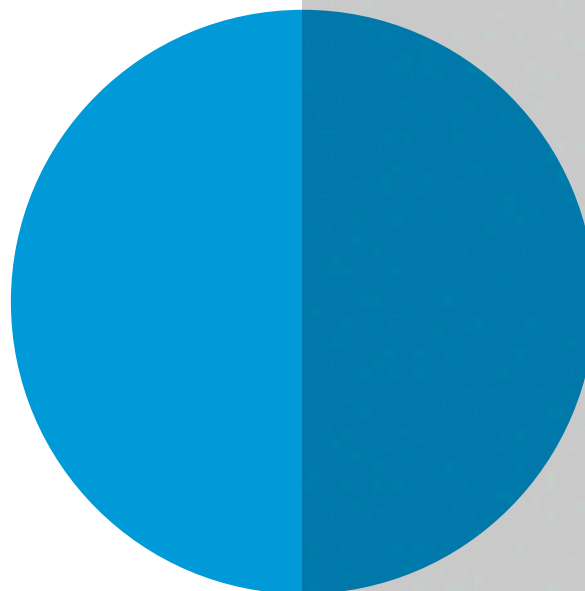
No matter if the development is managed by our HQ, regionally, or at a local level, all projects are backed by strong engineering support. Integration is enabled either through the use of own protocol specification, or via the ONVIF Profile S open standard.



Canon's WebView API protocol gives the deepest level of integration and enables all the features of our network camera to be fully supported by third party solutions.



On the other hand using ONVIF as a base for integration enables new solutions to be supported quickly, as a first step before an API driver is developed, while still supporting many of the advanced features of the camera, such as search and reconfiguration of recording data, through custom commands.




In response to market demands and specific project requests, new integrations are always in development. For more information on the latest integration solutions, please log on to **www.canon-europe.com**






The latest ONVIF Profile G also enables the access, management and retrieval of surveillance recordings on the camera's removable SD Card – or other edge storage device.

Specification	PTZ Cameras						
							
	VB-R10VE	VB-R11VE	VB-R11	VB-H43/B	VB-M42/B	VB-S30D	VB-S31D
Resolution	1.3MP			2.1MP	1.3MP	2.1MP	
Camera Type	360° Pan Tilt Zoom Cont. Rotation Auto-Flip			340° Pan Tilt Zoom		350° Ultra-Compact Pan Tilt Zoom	
Max Pan/Tilt Speed	450°/Sec			150°/Sec		120°/Sec	
CMOS Sensor	1/3"					1/4.85"	1/3"
Scanning	Primary Colour Filter, Progressive Scan						
Max Video Resolution (16x9)	720P			1080P	720P	1080P	
Lens	30x optical / 20x digital Zoom 4.4 - 132mm f/1.4 - f/4.6			20x optical / 12x digital Zoom 4.7 - 94mm f/1.6 - f/3.5		3.5x optical / 4x digital Zoom 2.25 - 7.88mm f/1.4 - f/2.6	4x digital Zoom 2.7mm Fixed f/1.6
Horizontal Viewing Angle (16x9)	58.4° - 2.1°			60.4° - 3.2°		77.7° - 20.7°	95°
Day and Night Switching	True Day / Night					Digital Night Mode	
Built-In IR LEDs (Range)	-						
Min Subject Illumination .1 (Colour/Mono)	0.03lux (colour) 0.002lux (mono)			0.4lux (colour) 0.02lux (mono)		0.95lux (col) 0.5lux (mono)	0.45lux (col) 0.25lux (mono)
Video Streams	2x H.264, 3x JPEG						
Max Frame Rate .2	JPEG : 30FPS H.264 :30FPS 2x H.264 : 15fps ea						
Presets / Tours	256 / 5 Tours - 60 Presets/Tour			20 / 1 Tour - 20 Presets/Tour		20	
Backlight Compensation	Auto SSC						
Area-specific Data Size Reduction	ADSR			-			
Image Enhancements	Haze Compensation			-			
Control	Auto Tracking			-			
Video	Moving, Abandoned, Removed, Tampering, Passing Line, Intrusion			Moving, Abandoned, Removed, Tampering, Passing Line			
Audio	-	Volume		Volume			
	-	Scream		-			
No of Linked Events / Alarms	-	4 Events (2 Alarms)		-			
Edge Storage Media Type	SD / SDHC / SDXC					micro(SD/SDHC/SDXC)	
Audio Support	-	Line/Mic In x1 Line Out x 1	Line/Mic In x1 Line Out x 1	Line/Mic In x1 Line Out x 1		Line/Mic In x 1	
Alarm Input / Output	-	2x In / 2x Out	2x In / 2x Out	2x In / 2x Out		1 x In / 1x Out	
Operating Temp	-50°C to +55°C (-58°F to +131°F)		-10°C to +50°C (+14°F to +122°F)				
Cold Start Temp & Req'd Supply	-30°C (-22°F) with 24Vac or PoE+		-10°C (-14°F)				
Built-in Heater	Yes		-	-			
ONVIF Profile	Profile S, Profile G			Profile S			
PTRZ Functionality	-						
Outdoor Rating	IP66 & IK10		-				
Environmental Resistance	NEMA250 Type 4X, IEC 60950-1/22		-				
Connection Type	Connector	Pigtail Cable	Connector				
Power Supply	PoE+/PoE 12Vdc/24Vac		PoE 12Vdc/24Vac			PoE	

Outdoor Domes			
			
VB-M640VE	VB-M641VE	VB-H630VE	VB-M620VE
1.3MP		2.1MP	1.3MP
Vandal Resistant Fixed Dome			
-			
1/3"			
Primary Colour Filter, Progressive Scan			
720P		1080P	720P
2.4x optical / 4x digital Zoom 2.55 - 6.12mm f/1.2 - f/1.8		3x optical / 4x digital Zoom 2.8 - 8.4mm f/1.2 - f/2.0	
111.5° - 46.2°		111° - 36.5°	
True Day / Night			
-			
0.02lux (colour) 0.001lux (mono)		0.3lux (colour) 0.015lux (mono)	
2x H.264, 3x JPEG			
JPEG : 30FPS, H.264 :30FPS, 2x H.264 : 15FPS ea			
20			
Auto-SSC			
ADSR		-	
Haze Compensation		-	
-		-	
Moving, Abandoned, Removed, Tampering, Passing Line, Intrusion		Moving, Abandoned, Removed, Tampering, Passing Line	
-	Volume	Volume	
-	Scream	-	
-	4 Events (2 Alarms)	-	
micro(SD/SDHC/SDXC)		SD / SDHC / SDXC	
	Line/Mic In x1 Line Out x 1	Line/Mic In x1 Line Out x 1	
	2x In / 2x Out	2x In / 2x Out	
-10°C to +55°C (+14°F to +131°F) (VB-M641VE : -40°C with optional heater)		-10°C to +50°C (+14°F to +122°F) (-30°C with optional heater)	
-10°C (-14°F) with 24Vac	-30°C (-22°F) with 24Vac	-10°C (-14°F) with 24Vac	
-	Optional	Optional	
Profile S, Profile G		Profile S	
Pan, Tilt, Rotation, Zoom & Focus			
IP66 & IK10			
NEMA250 Type 4X, IEC 60950-1/22		-	
Pigtail Cable		Connector	
PoE	PoE 12Vdc/24Vac		

Indoor Domes					
					
VB-M640V	VB-M641V	VB-H630D	VB-M620D	VB-S800D	VB-S805D
1.3MP		2.1MP	1.3MP	2.1MP	1.3MP
Vandal Resistant Fixed Dome		Fixed Dome		Ultra-Compact Fixed Dome	
-					
1/3"					
Primary Colour Filter, Progressive scan					
720P		1080P	720P	1080P	720P
2.4x optical / 4x digital Zoom 2.55 - 6.12mm f/1.2 - f/1.8		3x optical / 4x digital Zoom 2.8 - 8.4mm f/1.2 - f/2.0		4x digital Zoom 2.7mm Fixed f/1.6	
111.5° - 46.2°		111° - 36.5°		95.0°	
True Day / Night				Digital Night Mode	
-					
0.02lux (colour) 0.001lux (mono)		0.3lux (colour) 0.015lux (mono)		0.45lux (colour) 0.25lux (mono)	
2x H.264, 3x JPEG					
JPEG : 30FPS, H.264 :30FPS, 2x H.264 : 15FPS ea					
20					
Auto-SSC					
ADSR		-			
Haze Compensation		-			
-		-			
Moving, Abandoned, Removed, Tampering, Passing Line, Intrusion		Moving, Abandoned, Removed, Tampering, Passing Line			
-	Volume	Volume			
-	Scream	-			
-	4 Events (2 Alarms)				
micro(SD/SDHC/SDXC)		SD / SDHC / SDXC		micro(SD/SDHC/SDXC)	
-	Line/Mic In x1 Line Out x 1	Line/Mic In x1 Line Out x 1		Line/Mic In x1	
-	2x In / 2x Out	2x In / 2x Out		1x In / 1x Out	
-10°C to +50°C (+14°F to +122°F)		-10°C to +50°C (+14°F to +122°F)			
-10°C (-14°F)		-10°C (-14°F)			
-		-			
Profile S, Profile G		Profile S			
Pan, Tilt, Rotation, Zoom & Focus				-	
IK10		-			
-					
Connector					
PoE	PoE, 12Vdc/24ac	PoE, 12Vdc/24Vac		PoE	

Fixed Box					
					
VB-M740E	VB-M741LE	VB-H730F	VB-M720F	VB-S900F	VB-S905F
1.3MP		2.1MP	1.3MP	2.1MP	1.3MP
Outdoor Fixed Bullet		Fixed Box		Ultra-Compact Fixed Box	
-					
1/3"					
Primary Colour Filter, Progressive scan					
720P		1080P	720P	1080P	720P
2.4x optical / 4x digital Zoom 2.55 - 6.12mm f/1.2 - f/1.8		3x optical / 4x digital Zoom 2.8 - 8.4mm f/1.2 - f/2.0		4x digital Zoom 2.7mm Fixed f/1.6	
113.4° - 46.5°		112.6° - 36.7°		96.0°	
True Day / Night				Digital Night Mode	
-	30m	-			
0.02lux (colour) 0.001lux (mono)		0.3lux (colour) 0.015lux (mono)		0.4lux (colour) 0.2lux (mono)	
2x H.264, 3x JPEG					
JPEG : 30FPS, H.264 :30FPS, 2x H.264 : 15FPS ea					
20					
Auto-SSC					
ADSR		-			
Haze Compensation		-			
-		-			
Moving, Abandoned, Removed, Tampering, Passing Line, Intrusion		Moving, Abandoned, Removed, Tampering, Passing Line			
-	Volume	Volume			
-	Scream	-			
-	4 Events (2 Alarms)				
SD / SDHC / SDXC				micro(SD/SDHC/SDXC)	
-	Line/Mic In x1 Line Out x 1	Line/Mic In x1, Line Out x 1		Line/Mic In x1	
-	2x In / 2x Out	2x In / 2x Out		1x In / 1x Out	
-10°C - +55°C (+14°F - +131°F)	-50°C - +55°C (+58°F - +131°F)	-10°C to +50°C (+14°F to +122°F)			
-10°C (-14°F)	-30° (-22°F) with 24Vac or PoE+	-10°C (-14°F)			
-	Yes	-			
	Profile S, Profile G	Profile S			
Zoom & Focus				-	
IP66		-			
NEMA250 Type 4X, IEC 60950-1/22		-			
Pigtail Cable		Connector			
PoE	PoE+/PoE 12Vdc/24Vac	PoE 12Vdc/24Vac		PoE	



Make sure your security needs are covered.
Contact Canon at network.camera@canon-europe.com

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