

# Essentials Gen4 2MP Varifocal IP Bullet Camera



## Key Features

- 2MP (1080p) resolution for HD quality images
- Manage bandwidth resources with H.264 and H.265 dual-stream encoding
- Up to 30 frames per second for seamless video streaming
- 2.7–13.5mm varifocal lens with motorized zoom
- One-touch auto-focus
- IR Illuminators deliver clear video when viewing dark scenes
- IP67 environmental rating to protect against dust and water
- True Day/Night functionality for low light conditions
- WDR to simultaneously view high-contrasting areas

## Meet a Variety of Recording Requirements at a Low Cost

The Illustra Essentials Gen4 Varifocal Bullet camera offers resolutions up to 1080p with IR illumination to manage low light scenes. The affordable cameras capture video in a variety of lighting conditions with features such as True Day/Night and Wide Dynamic Range to fulfill security operators' expectations, all while maintaining a lower price point.

The camera includes the latest compression technologies by supporting both H.265 and H.264 codecs resulting in reduced bandwidth and storage requirements. To aid ease of setup all Essentials Gen4 models support one-touch auto-focus, and the varifocal models provide motorized zoom.

Rated IP67 for an additional degree of environmental protection, the Varifocal Bullet exceeds previous generations of Illustra Essentials cameras.

The Essential Gen4 Varifocal Bullet also features corridor mode which allows cameras to maximize video surveillance in narrow vertical situations. Ideal for hallways, retail aisles, and tunnels this mode creates a unique high quality, vertical video.

## Record Video with Low Light Clarity

Poor low-light performance by megapixel cameras hampers some of the most important tasks security professionals need to perform. Cameras that fail in low light clarity negatively impact both the necessary functions of security and cost of ownership.

The sensitive processor and sensor combination on the Essentials 2MP Varifocal Bullet switches the camera automatically between color and black and white mode in a feature known as True Day/Night. Regardless of the ambient illumination level, the camera is able to maintain crystal clear images in low light scenarios.

## Balance Images with Wide Dynamic Range

The difference in extreme lighting within a scene is known as dynamic range. Cameras with the Wide Dynamic Range functionality have special software that allows them to balance foreground and background lighting for one clear image. This makes them ideal for recording areas like store entrances where the contrast between the sunshine outside and the dim lighting inside can be extremely difficult to record.

The Illustra Essentials 2MP Varifocal Bullet camera takes advantage of the latest pixel-by-pixel dynamic range offered today. Maintain facial details with whole scene clarity by working within the megapixel lens to enhance the precision of the images for a high-resolution HD solution that excels in an array of challenging lighting conditions.

## Specifications

Operational	
Resolution & Aspect Ratio	1920 x 1080 (1080p) 16:9
Max Frame Rate	30fps
Video Compression	H.264, H.265, MJPEG
Video Streams	Dual Stream with both streams at a maximum of 1080p @ 30ips
Imager	1/2.8", Sony CMOS
S/N Ratio	More than 50dB
Image Orientation Settings	Off, flip, mirror, both
Lens Type	f2.7mm~13.5mm
Focus Control	Remote On-Push Focus and Remote Manual Adjustment
Aperture	F1.4~2.8
Focal Length	2.7 - 13.5mm
Field of View (H/V)	
Wide Angle	100°/53°
Telephoto	34°/20°
Shutter Speed	1/2~1/10,000s (Manual:default NTSC=1/30s, PAL=1/25s) / (Shutter-priority:default NTSC=1/60s, PAL=1/50s)
Minimum Illumination	
Color	0.08 Lux (50IRE)   0.03 Lux (30IRE)
B/W	0.05 Lux (50IRE)   0.02 Lux (30IRE)
With IR	0.0 Lux
Day/Night	True Day/Night with ICR
IR LEDS	Yes
IR Distance	30m
Noise Reduction	3D
Wide Dynamic Range	True WDR 120dB
ONVIF-Compliant	Profile S/G/Q
Motion Detection Zones	3
Blur Detection Zones	Yes
Privacy Zones	8
Image Rotation	Corridor
Analog Video Output	No
Audio	No
Simultaneous Users	5

Network	
Ethernet Interface	IEEE 802.3, 10/100 Base-T/TX, auto sensing, 1 x RJ45
Supported Protocols	TCP/IP, IPv4, IPv6, TCP, UDP, HTTP, FTP, DHCP, WS-Discovery, DNS, DDNS, RTP, TLS, Unicast, NTP, SMTP, WSSecurity, IEEE 802.1x, PEAP, SSH, HTTPS, SSL, SOAP, WSAddressing, SNMP, UPnP, RTSP, LLDP
Configuration Management	
Web Browser	IE 11 or above, Firefox, Chrome, Safari, Microsoft Edge
Security	Enhanced Security
Onboard Storage	
Card Support	SDXC up to 256GB
Pre-Alarm Recording	1-10 sec
Recording Format	AVI
Recording Trigger	Bur Detection, Motion Detection
VideoEdge TrickleStor	No
Electrical	
Power Input	DC12V; PoE IEEE 802.3af Class 3
Maximum Power Draw	9.9W
Physical	
Dimensions (HxWxH)	77mm x 84mm x 176mm (3.03in x 3.3in x 6.92in)
Weight	0.58kg (1.28 lbs)
Housing Color	White RAL 9003
Operating Temperature	Cold Start Temperature: -20° C to 60° C (-4° F to 140° F) Operating Temperature: -30° C to 60° C (-22° F to 140° F)
Storage Temperature	-40°C to 60°C (-40°F to 140°F)
Relative Humidity	10% to 90% (non-condensing)
Vandal Resistant	IK07
Outdoor Rating	IP67
Regulatory	
Safety	UL 62368-1, IEC 62368-1, EN 62338-1, IEC 62471
Emissions	FCC CFR 47, Part 15 Class A, EN 55032
Immunity	EN 50130-4, EN 61000-3-2, EN 61000-3-3
Environment	RoHS, Reach, WEEE



## Ordering Information

Model	Description
IES02-B12-BI04	Illustra Essentials Gen4 2MP Bullet VF - 2.7-13.5mm motorised varifocal lens with remote focus, white, True D/N with IR, True WDR, PoE/12VDC

## About Johnson Controls

Johnson Controls is a global diversified technology and multi-industrial leader serving a wide range of customers in more than 150 countries. Our 120,000 employees create intelligent buildings, efficient energy solutions, integrated infrastructure and next generation transportation systems that work seamlessly together to deliver on the promise of smart cities and communities. Our commitment to sustainability dates back to our roots in 1885, with the invention of the first electric room thermostat.

For additional information, please visit [www.illustracameras.com](http://www.illustracameras.com) or follow Illustra on LinkedIn, Twitter, and Facebook.