

## MicroBullet® IP Megapixel Bullet Cameras

1080p or 3 Megapixel (MP) Ultra Small H.264 All-in-One 2.8–8mm Motorized Lens True Day/Night IR Indoor/Outdoor Bullet-Style IP Cameras with SNAPstream™ (Smart Noise Adaptation and Processing) and WDR (Wide Dynamic Range) Models



The MicroBullet® multi-megapixel camera series delivers 1080p or 3-megapixel resolutions in a very compact design. These true day/night cameras are available with a 2.8–8mm motorized lens, day/night mechanical IR cut filter, and integrated IR LEDs. MicroBullet is ideal for applications with normal to challenging lighting conditions regardless of the time of day.

MicroBullet megapixel IP cameras deliver professional surveillance, with ease of installation and set-up for a wide variety of requirements. The remote focus and zoom motorized lens allows users to simply click “Short-range Focus” or “Full-range Focus”, saving installers time and end users money.

For applications with strong backlighting, reflections from wet flooring or puddles, or contrast due to fog, mist, or glare, wide dynamic range 1080p

and 3MP models are available. MicroBullet features CorridorView™ for better coverage of hallways and corridors, and SNAPstream™ (Smart Noise Adaptation and Processing) to reduce bandwidth without impacting image quality.

MicroBullet megapixel IP cameras are IP66 rated for both indoor and outdoor applications. All models feature an impact resistant cast-aluminum housing capable of withstanding the equivalent of 55 kg (120 lbs) of force.

The MicroBullet is ONVIF (Open Network Video Interface Forum) Series S compliant, providing interoperability between network video products regardless of manufacturer.



### Series Features

- 1080p and 3MP Models
- SNAPstream™ Capability to Reduce Bandwidth without Impacting Image Quality
- True WDR up to 100dB at Full Resolution Available on Select Models
- True Day/Night Functionality with Mechanical IR Cut Filter
- CorridorView™ Allows 90° Image Rotation for Better Coverage in Hallways and Corridors
- Binning Mode for 3MP Cameras
- Casino Mode™ Maintains 30fps or Higher Required by Gaming Industry Regulations (Select 1080p Models)
- Dual Encoder H.264/MJPEG
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control, Multi-Streaming, Multicasting and Forensic Zooming
- Remote Focus/Zoom 2.8–8mm Motorized Lens
- Integrated IR LEDs
- Network Protocols Include 802.1x, IPv6, QoS, DHCP, and More
- All-in-One H.264 Total Power Over Ethernet (PoE) Solution
- IK-10 Impact-Resistant Housing
- Outdoor Rated IP66
- Easily Adjustable 3-Axis Wall Mount

## Camera Imaging Specifications

Model		AV2325DNIR	AV2326DNIR	AV3325DNIR	AV3326DNIR
Image Sensor (CMOS)		1080p (2.1MP)	1080p (2.1MP)	3MP	3MP
Optical Format		1/3"	1/3.2"	1/3"	1/3.2"
Pixel Pitch		2.2µm	2.2µm	2.2µm	2.2µm
Minimum Illumination	Color (Day Mode)	0.2 Lux	0.2 Lux	0.2 Lux	0.2 Lux
	Color Binning (Day Mode)	-	-	0.1 Lux	0.1 Lux
	B/W (Night Mode)	0.02 Lux, IR sensitive	0.02 Lux, IR sensitive	0.02 Lux, IR sensitive	0.02 Lux, IR sensitive
Full FOV Resolution		1920 H x 1080 V	1920 H x 1080 V	2048 H x 1536 V	2048 H x 1536 V
1/4 Resolution		960 H x 540 V	960 H x 540 V	1024 H x 768 V	1024 H x 768 V
Dynamic Range		69.5dB	WDR up to 100dB	69.5dB	WDR up to 100dB
Frame Rates†	At Max Res.	30fps (1920 x 1080)	30fps (1920 x 1080)	21fps (2048 x 1536)	21fps (2048 x 1536)
	Cropped	30fps (1280 x 1024)	30fps (1280 x 1024)	30fps (1920 x 1080) 30fps (1280 x 1024)	30fps (1920 x 1080) 30fps (1280 x 1024)
	Binning Mode	-	-	46fps (1024 x 768) 64fps (960 x 540)	21fps (1024 x 768) 21fps (800 x 600) 21fps (960 x 540) 21fps (640 x 512)
Lens	Vari-Focal Lens	2.8–8mm, 1/2.5", F1.6, integrated			
	H-FOV	82°–41°	82°–41°	100°–49°	100°–49°

## Programmability

Optics	Remote focus and remote zoom
Low Light Performance	Pixel Binning Mode 3MP models
Picture-in-Picture	Simultaneous delivery of full field-of-view and zoomed images
Programmable Shutter Speed	Controls motion blur, 1ms–500ms
Motion Detection	Real-time, 1024 detection zones
Privacy Masking	Unlimited
Casino Mode™	Maintains 30fps or higher (AV2325 model)
Flexible Cropping	Resolution windowing down to 1x1 pixel for JPEG and 2x2 pixels for H.264
Backlight Compensation	Reference windows for auto exposure and white balance
Flicker Control	5Hz–255Hz adjustable
Image Rotation	CorridorView™ (90°, 180° and 270° image rotation)
Wide Dynamic Range	Auto switch control adjustment between WDR and LDR modes (WDR models)
Noise Reduction	Low light noise filter control
Efficiency	SNAPstream™ (Smart Noise Adaptation and Processing)
	Bit rate and bandwidth limitation control
	Bandwidth and storage savings by running at 1/4 resolution
Sharpness	Selectable enhancement level
Miscellaneous	Programmable resolution, brightness, saturation, gamma, tint
	Electronic pan, tilt, zoom (PTZ)

## Data Transmission

Compression Type	H.264 (MPEG-4, Part 10)/Motion JPEG
	21 levels of quality
Network Protocols	RTSP, RTP/TCP, RTP/UDP, HTTP, DHCP, TFTP, QoS, IPv4, IPv6, 802.1x
Network Interface	100Base-T Ethernet
Multi-Streaming	8 non-identical streams

## Compliance

Industry Standard	ONVIF Profile S conformant
Listings	UL (CB)
FCC Compliance	47 CFR 15 Class A
Environmental	RoHS, REACH, WEEE
Markings	(CE) EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3, EN60950-1
Mechanical	IP66 (EN60529), IK-10
CoO	Designed in the USA, made in China

## Environmental

Operating temperature	-40°C (-40°F) to +50°C (122°F)
Humidity	0% to 90% (non-condensing)
Storage temperature	-40°C (-40°F) to +60°C (140°F)

## Electrical

Power Over Ethernet	PoE 802.3af, Class 3
Power Consumption	6.5 watts DC power max

† Maximum with H.264 compression

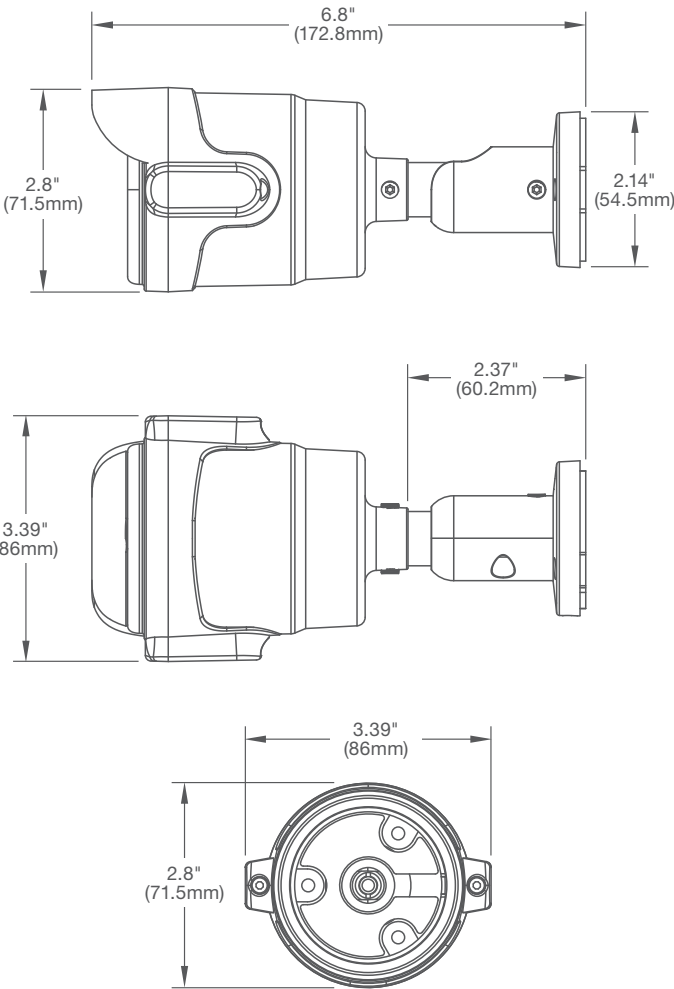
IR Illuminator

LEDs	12pcs 850 LEDs
Projection Distance	50ft (15m) max
Projection Angle	60° and 75°

Mechanical

Casing	Die-cast aluminum cylindrical (bullet-style) housing	
	IP66 weather proof standard	
	IK-10 impact-resistant	
Mount	Easily adjustable 3-axis with 360° pan, 90° tilt and 360° z-axis	
Dimensions <small>(See Dimensions)</small>	Unit	2.8" H (71.5mm) x 3.39" W (86mm) x 6.8" D (172.8mm)
	Packaged	4.7" H (120mm) x 5.3" W (135mm) x 7.9" L (200mm)
Weight	Unit	1.01lbs (0.46kg)
	Packaged	1.32lbs (0.60kg)

Dimensions



See Next Page for Ordering Information

Ordering Information



Model Numbers

1080p	AV2325DNIR	
	AV2326DNIR	WDR
3MP	AV3325DNIR	
	AV3326DNIR	WDR

Accessories

MCB-JBA*	Round Junction Box for MicroBullet® Series
MCD-EBA	Round Electrical Box Adapter Plate for MicroDome® Series
AV-EBAS	Square Electrical Box Adapter
MCB-JBAS + AV-JBA	Mount Plate for MicroBullet Series with AV-JBA (Standard Junction Box)

\* Recommended solution for low profile installation

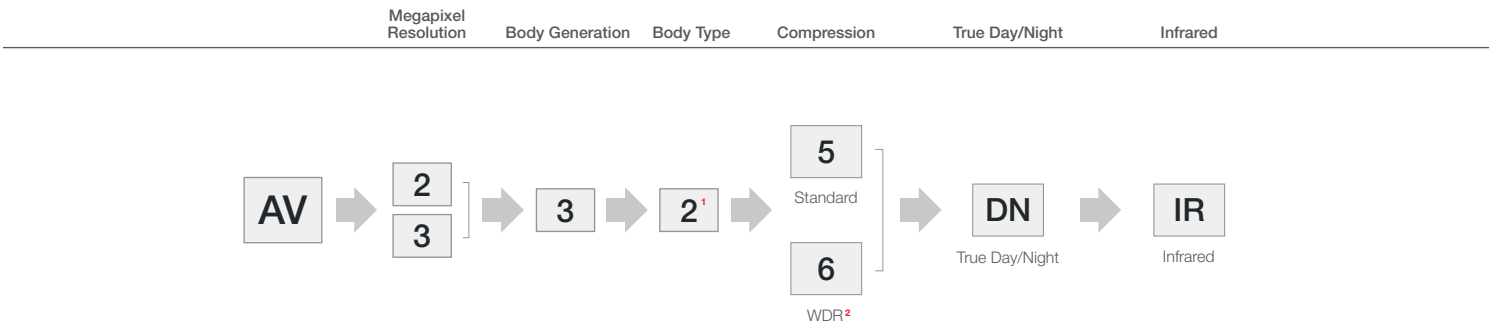
Model Specific Features

Model	Resolution	Frame Rate†	Features		
AV2325DNIR	1080p	30fps	-	Casino Mode™	-
AV2326DNIR	1080p	30fps	WDR	-	-
AV3325DNIR	3MP	21fps	-	-	Binning
AV3326DNIR	3MP	21fps	WDR	-	Binning

Configurations



Create Your Model (Example: AV2326DNIR)



† Maximum with H.264 compression  
1 "2" represents Bullet (MicroBullet & MegaView®) product lines  
2 WDR for AV2326 and AV3326 models only