

## MegaBall® 2

1080p-5MP H.264 All-in-One Motorized P-Iris Lens Day/Night Indoor IP Cameras with Optional Wide Dynamic Range (WDR) or 5MP H.264 All-in-One Manual Panomorph Lens Day/Night Indoor IP Cameras

### Remote Focus/Zoom Models

1080p	1080p WDR	3 Megapixel	3 Megapixel WDR	5 Megapixel
AV2245PM-D	AV2246PM-D	AV3245PM-D	AV3246PM-D	AV5245PM-D
AV2245PM-D-LG	AV2246PM-D-LG	AV3245PM-D-LG	AV3246PM-D-LG	AV5245PM-D-LG
AV2245PM-W	AV2246PM-W	AV3245PM-W	AV3246PM-W	AV5245PM-W

### Panomorph Models

5 Megapixel
AV5245DN-01-W
AV5245DN-01-WA
AV5245DN-01-D
AV5245DN-01-DA
AV5245DN-01-D-LG
AV5245DN-01-DA-LG



Optional Manual ImmerVision Enables® Panomorph Lens Available on 5MP Models

\* Dome Models can be configured with or without a dome bubble. Light Gray (-LG) housing available for all Dome models.

Stylish MegaBall® 2 multi-megapixel cameras provide ample resolution to zoom-in for details in live or recorded video. These indoor all-in-one solutions integrate a 1080p, 3 or 5-megapixel (MP) camera with fast frame rates and a remote focus/zoom P-iris lens with an adjustable wall mount or flush and surface mount dome housing. On 5MP models, an optional manual lens with an ImmerVision Enables® panomorph system offers 180° and 360° views.

H.264 compression reduces network bandwidth and storage requirements while delivering full frame rates and full resolution without sacrificing image quality. Day/Night functionality allows for 24-hour surveillance. Wide Dynamic Range (WDR) up to 100dB at full resolution balances light and dark areas in the same scene (1080p and 3MP). Binning mode for increased low light sensitivity is available for 3MP and 5MP cameras.

Integrated Motorized Lens with Remote Focus and Zoom (PM Models)	P-Iris Control for Best Depth of Field and Image Clarity (PM Models)	Panomorph Lens (DN-01 Models)	All-in-One Ball Solution	Integrated Microphone (-A Models)	True Day/Night with IR Cut Filter	Pixel Binning Mode on 3 and 5MP Models	Wide Dynamic Range Available on Some 1080p and 3MP Models	Casino Mode™ Maintains at Least 30fps on AV2245 Models	Dual Encoder H.264/MJPEG

### Features:

- Remote Focus/Zoom P-Iris Lens (PM Models)
- P-Iris Control to Get Best Depth of Field and Image Clarity (PM Models)
- Optional True WDR up to 100dB at Full Resolution Available on Some 1080p and 3MP Models: See Clearly in Shaded and Bright Light Conditions Simultaneously
- Integrated Panomorph Solution for 180° and 360° Fields of View (DN-01 Models)
- Light Gray and Black Dome Options
- Casino Mode™ Guarantees Continuous 30fps Frame Rate Required by Gaming Industry Regulations (AV2245 Models)
- Binning Mode for Strong Low Light Performance on 3MP and 5MP Resolutions
- True Day/Night Functionality with Mechanical IR Cut Filter
- Tamper-Resistant Housing
- Integrated Microphone and Audio Out (-A Models Only)
- Installer Friendly Cable Management, 3-Axis Adjustment, In-Ceiling and Surface Mount Dome
- PoE and Auxiliary Power: 12-48V DC/24V AC
- Dual Encoder H.264/MJPEG
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control, Multi-Streaming and Forensic Zooming
- Fast Frame Rates
- PSIA Conformant
- New User-Friendly Webpage
- Reduced Overall System Cost
- Made in the USA



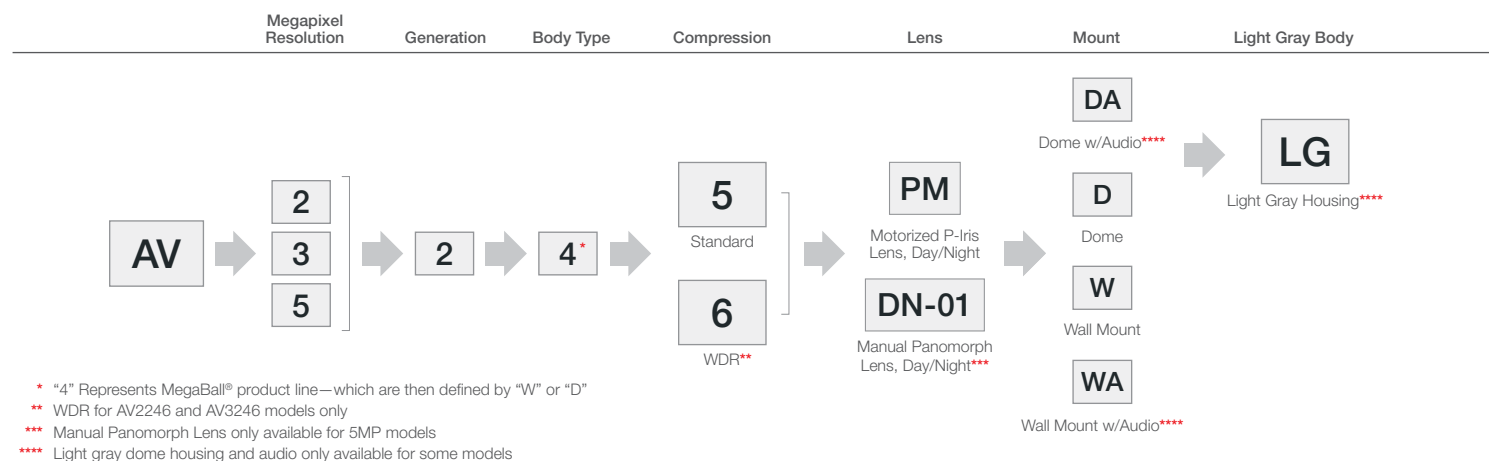
## Model Specific Features

Model	Resolution	Frame Rate	Features		
AV2245	1080p	31fps	-	Casino Mode™	-
AV2246	1080p	30fps	WDR	-	-
AV3245	3MP	21fps	-	-	Binning
AV3246	3MP	21fps	WDR	-	Binning
AV5245	5MP	14fps	-	-	Binning

## Build-to-Order Options

<b>-W</b>	Wall Mount Model
<b>-D</b>	Dome or Recessed Dome Model
<b>-LG</b>	Light Gray Dome
<b>PM</b>	Remote Zoom, Remote Focus, P-iris, Day/Night
<b>DN-01</b>	Manual Panomorph Lens, Day/Night
<b>-A</b>	Audio

## Create Your Model (Example: AV3246-PM-D-LG)



## Camera Imaging Specifications

Model	AV2245	AV2246	AV3245	AV3246	AV5245	
<b>Image Sensor (CMOS)</b>	1080p	1080p*	3MP*	3MP	5MP	
<b>Optical Format</b>	1/2.7"	1/3.2"	1/2.5"	1/3.2"	1/2.5"	
<b>Pixel Pitch</b>	3µm	2.2µm	2.2µm	2.2µm	2.2µm	
<b>Minimum Illumination</b>	Color (Day Mode)	0.1 Lux	0.3 Lux	0.3 Lux	0.3 Lux	
	Color Binning (Day Mode)	-	-	0.15 Lux	0.15 Lux	
	B/W (Night Mode)	0 Lux, IR sensitive	0 Lux, IR sensitive	0 Lux, IR sensitive	0 Lux, IR sensitive	0 Lux, IR sensitive
<b>Full FOV Resolution</b>	1920 H x 1080 V	1920 H x 1080 V	2048 H x 1536 V	2048 H x 1536 V	2592 H x 1944 V	
<b>1/4 Resolution</b>	960 H x 540 V	960 H x 540 V	1024 H x 768 V	1024 H x 768 V	1296 H x 972 V	
<b>Dynamic Range</b>	69dB	WDR up to 100dB	70.1dB	WDR up to 100dB	70.1dB	
<b>Maximum SNR</b>	45dB	49dB	45dB	49dB	45dB	
<b>Frame Rates</b>	At Max Resolution	31fps (1920 x 1080)	30fps (1920 x 1080)	21fps (2048 x 1536)	21fps (2048 x 1536)	14fps (2592 x 1944)
	Cropped	42fps (1280 x 1024)	41fps (1280 x 1024)	29fps (1920 x 1080) 41fps (1280 x 1024)	30fps (1920 x 1080) 41fps (1280 x 1024)	21fps (2048 x 1536) 29fps (1920 x 1080) 41fps (1280 x 1024)
	Binning Mode	-	-	46fps (1024 x 768) 64fps (960 x 540)	21fps (1024 x 768) 27fps (800 x 600) 31fps (960 x 540) 32fps (640 x 512)	34fps (1296 x 972) 46fps (1024 x 768) 64fps (960 x 540)
<b>Lens</b>	Motorized Lens	3-10mm, 1/2.7", F1.3 RZ, RF, P-iris H-FOV = 117°-36°	3-10mm, 1/2.7", F1.3 RZ, RF, P-iris H-FOV = 81°-26°	3-10mm, 1/2.7", F1.3 RZ, RF, P-iris H-FOV = 86°-28°	3-10mm, 1/2.7", F1.3 RZ, RF, P-iris H-FOV = 86°-28°	3.4-10mm, 1/2.5", F1.4 RZ, RF, P-iris H-FOV = 102°-35°
	Manual Panomorph Lens	-	-	-	-	0.98mm (Short Axis) 1.12mm (Long Axis) F2.0, H-FOV = 182°

\* Effective

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

Programmability	Remote focus, remote zoom and P-iris control (PM models)
	Motion Detection and privacy mask with 1024 detection zones
	Auto adjustment between WDR and LDR modes (WDR models only)
	Programmable shutter speed to help control motion blur
	Pixel Binning Mode (3MP and 5MP)
	Casino Mode™ maintains 30fps (AV2245 model)
	Flexible Cropping (resolution windowing down to 1x1 pixel for JPEG and 2x2 pixels for H.264)
	Low light noise filter control
	Bit rate and bandwidth limitation control
	Backlight compensation and multi-matrix white balance
	50/60Hz selectable flicker control
	Electronic pan, tilt, zoom (PTZ) and image flip 180°
	Programmable resolution, brightness, saturation, gamma, sharpness, tint

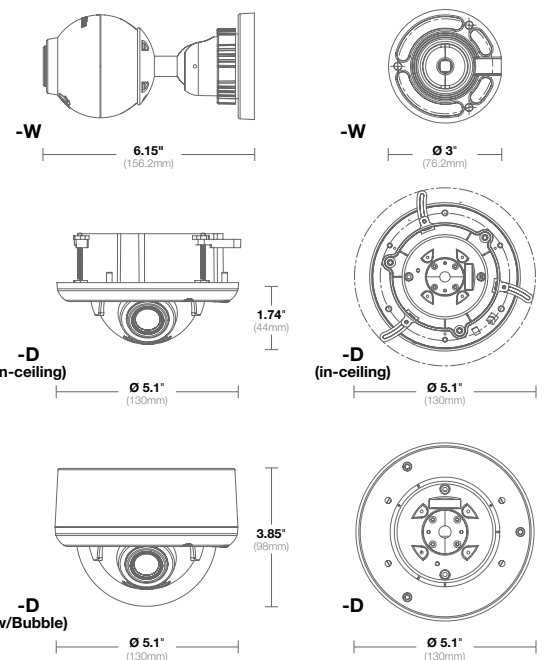
Compliance	<b>Industry Standard</b>	PSIA Conformant
	<b>Listings</b>	UL (CB)
	<b>FCC Compliance</b>	47 CFR 15 Class A
	<b>Environmental</b>	RoHS, REACH, WEEE
	<b>Markings</b>	(CE) EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3, EN60950

Environmental	<b>Operating temperature</b>	-5°C (-23°F) to +50°C (122°F)
	<b>Humidity</b>	0% to 90% (non-condensing)
	<b>Stable image temperature</b>	0°C (32°F) to +50°C (122°F)
	<b>Storage temperature</b>	-20°C (-4°F) to +60°C (140°F)

General Electrical	<b>Alarm Input</b>	General purpose opto-coupled	
	<b>Alarm Output</b>	General purpose opto-coupled (except -A models)	
	<b>Power Over Ethernet</b>	PoE 802.3af, Class 2	
	<b>Auxiliary Power</b>	12-48V DC, 24V AC	
	<b>Max Power Consumption</b>	AV2245PM	5.9 Watts DC Power
		AV3245PM / AV5245PM	6.3 Watts DC Power
AV2246PM / AV3246PM		6.8 Watts DC Power	
AV5245DN-01		5.7 Watts DC Power	

Audio Electrical (-A models only)	<b>Streaming</b>	Two-way
	<b>Compression</b>	G.711 PCM 8 kHz
	<b>Input/Output</b>	Integrated microphone / line output

Mechanical	<b>Casing</b>	<b>-W</b>	Die-cast aluminum 3" metal ball and mount
	<b>-D</b>	Plastic surface/in-ceiling dome with Acrylic bubble	
	<b>Gimbal</b>	Easy 3-axis camera adjustment with 360° pan, 90° tilt and 360° z-axis	
<b>Dimensions</b>	<b>-W</b>	Ø 3" (76.2mm) x 6.15" H (156.2mm)	
	<b>-D (in-ceiling)</b>	Ø 5.1" (130mm) x 1.74" H (44mm)	
	<b>-D (surface mount w/ bubble)</b>	Ø 5.1" (130mm) x 3.85" H (98mm)	
		<b>Camera Unit</b>	<b>Packaged</b>
<b>Weight</b>	<b>-W</b>	1.2lbs (0.54kg)	2.0lbs (0.9kg)
	<b>-D</b>	1.2lbs (0.54kg)	1.9lbs (0.86kg)
<b>Dome Color</b>	<b>-LG</b>	Light Gray Dome	



Accessories	D4S-WMT-B	Black wall mount with 3/4" NPT standard
	D4S-CMT-B	Black ceiling mount with 3/4" NPT standard
	D4S-WMT	Light Gray Wall mount with 3/4" NPT standard
	D4S-CMT	Light Gray Ceiling mount with 3/4" NPT standard
	SV-EBA	Light Gray Electrical box adapter
	SV-JBA	Light Gray Junction box adapter