

## MegaBall®

All-in-One Cameras with Fixed or Vari-Focal Lens Options

### MegaBall® Cameras

1.3Megapixel	1080p	1080p WDR	3Megapixel	3Megapixel WDR	5Megapixel
AV1145DN-04-W	AV2145DN-04-W	AV2146DN-04-W	AV3145DN-04-W	AV3146DN-04-W	AV5145DN-04-W
AV1145DN-04-D	AV2145DN-04-WA	AV2146DN-04-D	AV3145DN-04-D	AV3146DN-04-WA	AV5145DN-04-D
AV1145DN-04-D-LG	AV2145DN-04-D	AV2146DN-04-D-LG	AV3145DN-04-D-LG	AV3146DN-04-D	AV5145DN-04-D-LG
AV1145DN-3310-W	AV2145DN-04-D-LG	AV2146DN-3310-W	AV3145DN-3310-W	AV3146DN-04-D-LG	AV5145DN-04-DA
AV1145DN-3310-D	AV2145DN-04-DA	AV2146DN-3310-D	AV3145DN-3310-D	AV3146DN-04-DA	AV5145DN-04-DA-LG
AV1145DN-3310-D-LG	AV2145DN-04-DA-LG	AV2146DN-3310-D-LG	AV3145DN-3310-D-LG	AV3146DN-04-DA-LG	AV5145DN-3310-W
	AV2145DN-3310-W			AV3146DN-3310-W	AV5145DN-3310-WA
	AV2145DN-3310-WA			AV3146DN-3310-WA	AV5145DN-04-DA
	AV2145DN-3310-D			AV3146DN-3310-D	AV5145DN-3310-D-LG
	AV2145DN-3310-D-LG			AV3146DN-3310-D-LG	
	AV2145DN-3310-DA			AV3146DN-3310-DA	
	AV2145DN-3310-DA-LG			AV3146DN-3310-DA-LG	



Stylish **MegaBall®** multi-megapixel cameras provide ample resolution to zoom-in for details in live or recorded video. These indoor all-in-one solutions integrate a 1.3, 1080p, 3 or 5-megapixel camera with fast frame rates and a choice of IR corrected 4mm fixed or 3.3–10mm vari-focal lens with an adjustable wall mount or flush and surface mount dome housing. 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.

Wide Dynamic Range Available on Some 1080p and 3MP Models	All-in-One Ball Solution with Integrated Lens	True Day/Night with IR Cut Filter	Pixel Binning Mode on 3 and 5MP Models	Integrated Microphone on -A Models	Dual Encoder H.264/MJPEG	Casino Mode™ Maintains at Least 30fps on 1080p Models

### Features:

- All-in-One H.264 Indoor 3" Ball Shape Day/Night Solution
- 4mm Fixed Focal and 3.3-10mm Vari-Focal Lens Options
- Tamper Resistant
- Integrated Microphone and Audio Out (-A Models Only)
- Wall Mount Bracket and Dome Configurations
- Light Gray and Black Dome Options
- Installer Friendly
  - External Lens Adjustment
  - Cable Management
  - 3-Axis Adjustment
  - In-Ceiling and Surface Mounting
  - Bubble Option
- PSIA and ONVIF Conformant
- New User-Friendly Webpage
- True WDR up to 100dB at Full Resolution Allows Users to See Clearly in Shaded and Bright Light Conditions Simultaneously
- Casino™ Mode to Maintain 30fps or Better (1080p Models)
- Binned Mode to Increase Low Light Performance (3MP and 5 MP Models)
- Privacy Mask, Motion Detection, Flexible Cropping and Forensic Zooming
- True Day/Night Functionality with Removable IR Cut Filter



Model Specific Features

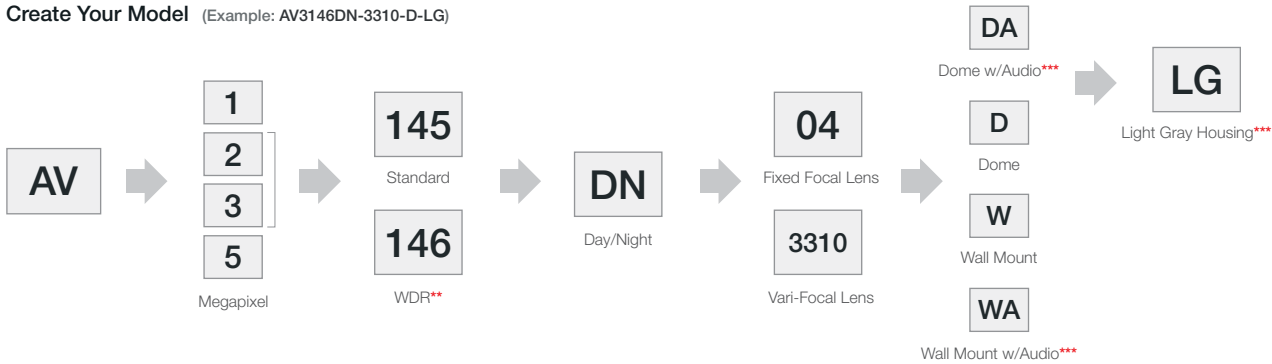
AV1145DN	1.3MP Effective	42fps	-	-	-
AV2145DN	1080p	31fps	-	Casino™ Mode	-
AV2146DN	1080p Effective	30fps	WDR	-	-
AV3145DN	3MP Effective	21fps	-	-	Binning
AV3146DN	3MP	21fps	WDR	-	Binning
AV5145DN	5MP	14fps	-	-	Binning

Build-to-Order Options

-W	Wall Mount Model
-D	Dome or Recessed Dome Model
-3310	3.3mm–10mm Vari-Focal Lens
-04	4mm Fixed Focal Lens
-A	Audio
-LG	Light Gray

Ex: AV3145DN-3310-DA-LG  
Light Gray 3MP MegaBall® Dome version with 3.3-10mm Lens and Audio

Create Your Model (Example: AV3146DN-3310-D-LG)



\*All WDR models have Day/Night functionality  
\*\*WDR for 2MP (1080p) and 3MP models only  
\*\*\*Audio and Light Gray dome housing only available in some configurations

Camera Imaging Specifications

Model		AV1145	AV2145	AV2146	AV3145	AV3146	AV5145
<b>Image Sensor (CMOS)</b>		1.3MP Effective	2.07MP (1080p)	2.07MP (1080p) Effective	3MP Effective	3MP	5MP
<b>Optical Format</b>		1/2.7*	1/2.7*	1/3.2*	1/2.5*	1/3.2*	1/2.5*
<b>Pixel Pitch</b>		3µm	3µm	2.2µm	2.2µm	2.2µm	2.2µm
<b>Minimum Illumination</b>	Color (day mode)	0.1 Lux	0.1 Lux	0.3 Lux	0.3 Lux	0.3 Lux	0.3 Lux
	Color Binning (day mode)	-	-	-	0.15 Lux	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	0 Lux, IR sensitive
<b>Full FOV Resolution</b>		1280 H x 1024 V	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>		640 H x 512 V	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	69dB	WDR up to 100dB	70.1dB	WDR up to 100dB	70.1dB
<b>Frame Rates</b>	At Max Res.	42fps (1280 x 1024)	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 H-FOV</b>	4mm, 1/2.5", F1.6 (- 04 version)	55°	82°	63°	71°	68°	90°
	3.3-10mm, 1/2.5", F1.6 (- 3310 version)	62°-24°	93°-36°	68°-26°	73°-28°	72°-28°	92°-36°

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

Programmability	Motion Detection and privacy mask with 1024 detection zones
	Pixel Binning Mode (3MP and 5MP)
	Auto adjustment between WDR and LDR models (1080p and 3MP WDR)
	Casino™ Mode maintains 30fps (AV2145 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
	Electronic pan, tilt, zoom (PTZ) and image flip 180°, 50/60Hz selectable flicker control
	Programmable resolution, brightness, saturation, gamma, sharpness, tint, shutter speed

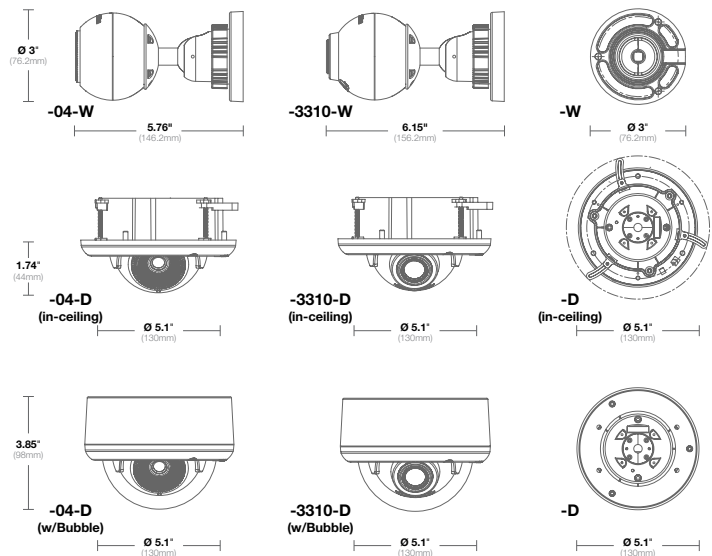
Compliance	Industry Standard	PSIA and ONVIF Conformant
	Listings	UL (CB)
	FCC Compliance	47 CFR 15 Class A
	Environmental	RoHS, REACH, WEEE
	Markings	(CE) EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3, EN60950

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

General Electrical	Digital Input	General purpose opto-coupled
	Digital Output	General purpose opto-coupled (non -A)
	Power Over Ethernet	PoE 802.3af, Class 2
	Auxiliary Power	12-48V DC, 24V AC
	Max Power Consumption	AV1145 / AV2145    5.0 Watts DC Power AV3145 / AV5145    5.3 Watts DC Power AV2146 / AV3146    6.0 Watts DC Power

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

Mechanical	Casing	-W	Die-cast aluminum 3" metal ball and mount
		-D	Plastic surface/in-ceiling dome w/ Acrylic bubble
	Lens	-3310	External lens adjustment for zoom, focus and iris
		-04	External lens adjustment for focus
	Gimbal	Easy 3-axis camera adjustment w/360° pan, 90° tilt and 360° z-axis	
	Dimensions	-04-W	Ø 3" (76.2mm) x 5.76" H (146.2mm)
		-3310-W	Ø 3" (76.2mm) x 6.15" H (156.2mm)
		-D (in-ceiling)	Ø 5.1" (130mm) x 1.74" H (44mm)
		-D (surface mount w/ bubble)	Ø 5.1" (130mm) x 3.85" H (98mm)
Weight		Camera Unit	Packaged
	-W	1.2lbs (0.54kg)	2.0lbs (0.9kg)
	-D	1.2lbs (0.54kg)	1.9lbs (0.86kg)
Dome Color	-LG	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	Wall mount with 3/4" NPT standard
	D4S-CMT	Ceiling mount with 3/4" NPT standard
	SV-EBA	Electrical box adapter
	SV-JBA	Junction box adapter