

MegaBall® IP Megapixel Cameras

1.3–5MP H.264 All-in-One Manual Vari-Focal Lens True Day/Night Indoor IP Cameras with WDR (Wide Dynamic Range) and Audio Models

Camera Models

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



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

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 an IR corrected 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. True Day/Night functionality allows for 24-hour surveillance. WDR (Wide Dynamic Range) 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 True Day/Night Solution
- 3.3–10mm Vari-Focal Lens
- 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
- Wall Mount Bracket and Dome Configurations
- Light Gray and Black Dome Options
- Casino Mode™ Guarantees Continuous 30fps Frame Rate Required by Gaming Industry Regulations (AV2145 Models)
- Binning Mode for Strong Low Light Performance on 3MP and 5MP Resolutions
- True Day/Night Functionality with Removable IR Cut Filter
- Tamper-Resistant Housing
- Integrated Microphone and Audio Out (-A Models Only)
- Installer Friendly Cable Management, External Lens Adjustment, 3-Axis Wall Mount Adjustment, In-Ceiling and Surface Mount Dome with Optional Bubble
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control, Multi-Streaming and Forensic Zooming
- New User-Friendly Web Interface
- Reduced Overall System Cost

Model Specific Features

Model	Resolution	Frame Rate	Features		
AV1145DN	1.3MP*	42fps	-	-	-
AV2145DN	1080p	31fps	-	Casino Mode™	-
AV2146DN	1080p*	30fps	WDR	-	-
AV3145DN	3MP*	21fps	-	-	Binning
AV3146DN	3MP	21fps	WDR	-	Binning
AV5145DN	5MP	14fps	-	-	Binning

* Effective

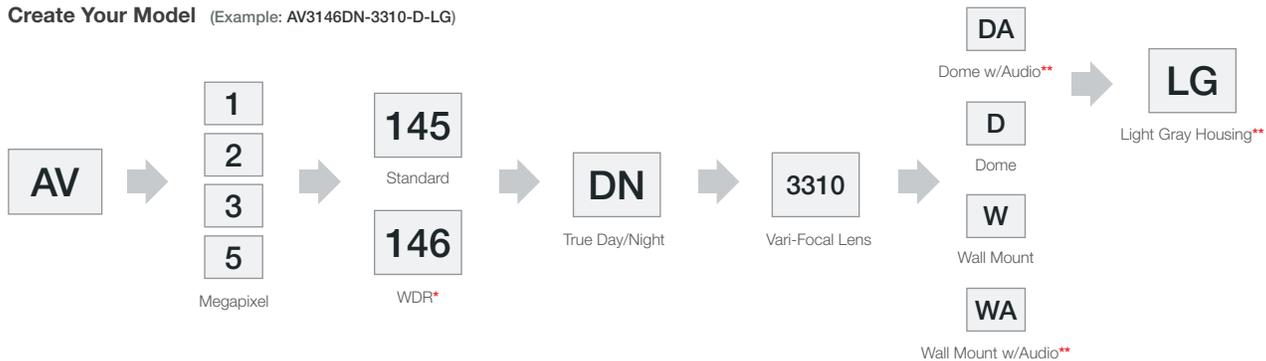
Build-to-Order Options

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

Ex: AV3145DN-3310-DA-LG

3MP MegaBall True Day/Night, 3.3–10mm Lens and Light Gray Dome Housing with Audio

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



* 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
Image Sensor (CMOS)		1.3MP*	1080p	1080p*	3MP*	3MP	5MP
Day/Night		True Day/Night with Automatic Removable IR Cut Filter					
Optical Format		1/2.7"	1/2.7"	1/3.2"	1/2.5"	1/3.2"	1/2.5"
Pixel Pitch		3µm	3µm	2.2µm	2.2µm	2.2µm	2.2µm
Minimum Illumination	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
Full FOV Resolution		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
1/4 Resolution		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
Dynamic Range		69dB	69dB	WDR up to 100dB	70.1dB	WDR up to 100dB	70.1dB
Frame Rates	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)
Lens H-FOV	3.3-10mm, 1/2.5", F1.6	62°-24°	93°-36°	68°-26°	73°-28°	72°-28°	92°-36°
Remote Focus / Remote Zoom		Yes	Yes	Yes	Yes	Yes	Yes
IR Corrected		Yes	Yes	Yes	Yes	Yes	Yes

* Effective

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

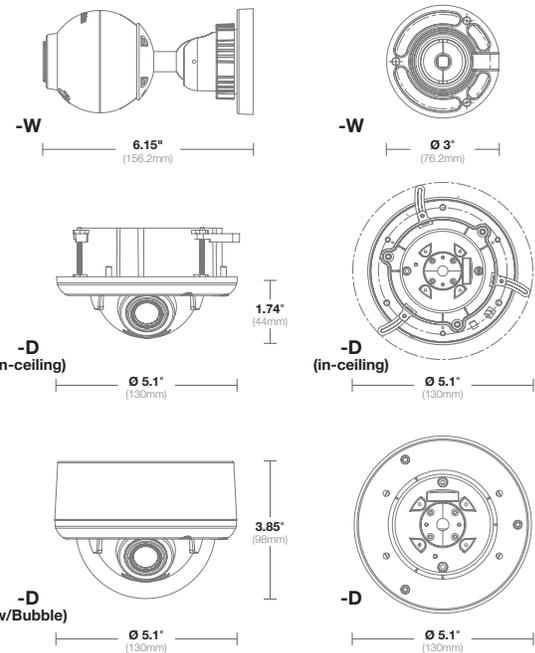
Compliance	Industry Standard	ONVIF Profile S and PSIA Conformant
	Listings	UL (CB)
	FCC Compliance	47 CFR 15 Class A
	Environmental	RoHS, REACH, WEEE
	Markings	(CE) EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3, EN60950

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	Alarm Input	General purpose opto-coupled
	Alarm Output	General purpose opto-coupled (except -A models)
	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		External lens adjustment for zoom, focus and iris
	Gimbal		Easy 3-axis camera adjustment w/360° pan, 90° tilt and 360° z-axis
Dimensions	-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)
		Camera Unit	Packaged
Weight	-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