

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.

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| 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

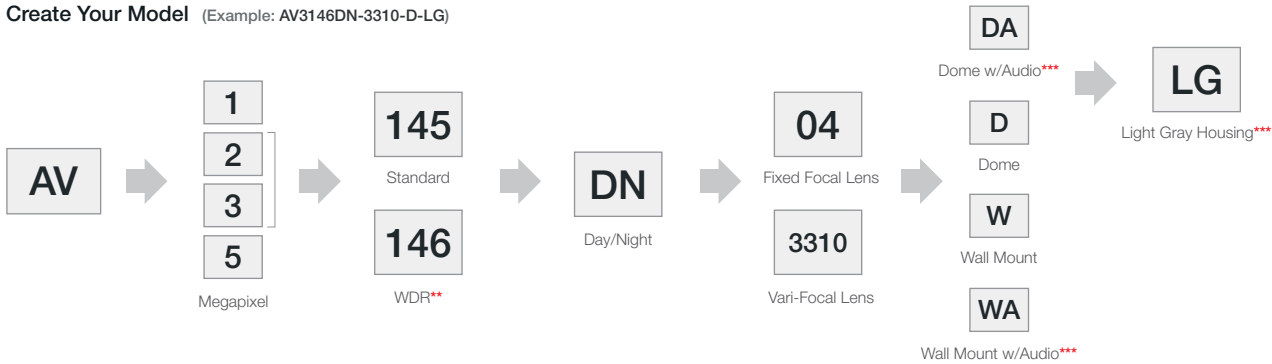
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|----------|-----------------|-------|-----|--------------|---------|
| AV1145DN | 1.3MP Effective | 42fps | - | - | - |
| AV2145DN | 1080p | 31fps | - | Casino™ Mode | - |
| AV2146DN | 1080p Effective | 30fps | WDR | - | - |
| AV3145DN | 3MP Effective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

Build-to-Order Options

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|-------|-----------------------------|
| -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 |
|-----------------------------|---|---------------------|---------------------|--------------------------|--|---|---|
| Image Sensor (CMOS) | | 1.3MP Effective | 2.07MP (1080p) | 2.07MP (1080p) Effective | 3MP Effective | 3MP | 5MP |
| 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 | 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° |

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| 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 | |

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| 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 |

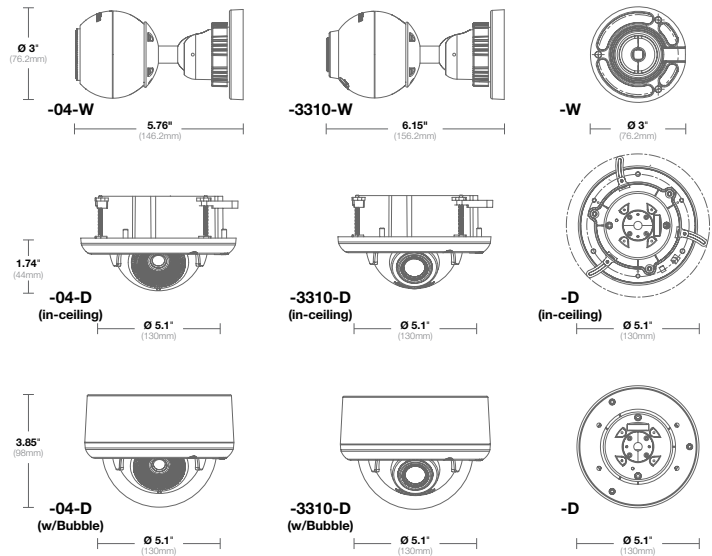
| | | |
|------------|-------------------|--|
| Compliance | Industry Standard | PSIA and ONVIF Conformant |
| | Listings | UL (CB) |
| | FCC Compliance | 47 CFR 15 Class A |
| | Environmental | RoHS, REACH, WEEE |
| | Markings | (CE) EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3, EN60950 |

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| 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) |

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| 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 |

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

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| 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 | |



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| 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 |