MegaIP™

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# MicroDome® G2 IP Megapixel Cameras

1.2, 1080p, 3, and 5 Megapixel (MP) H.264 All-in-One Ultra Low Profile Remote Focus True Day/Night Indoor/Outdoor Dome IP Cameras with SNAPstream™ (Smart Noise Adaptation and Processing), Enhanced WDR™ (Wide Dynamic Range), NightView™, and IR LED Models




The MicroDome® G2 multi-megapixel camera series delivers 1.2-, 1080p, 3-, or 5-megapixel resolutions. These true day/night cameras are available with a choice of lenses 2.8mm, 4mm, 6mm, 8mm, 12mm, and 16mm options. With a day/night mechanical IR cut filter this camera is ideal for applications with challenging lighting conditions, regardless the time of day.

The MicroDome G2 megapixel IP camera series is available in an indoor, in-ceiling housing or in a surface mount IP66 rated version for indoor and outdoor applications. Surface and flush mount models feature a vandal resistant, IK-10 rated cast-aluminum housing with a polycarbonate bubble making it capable of withstanding the equivalent of 55 kg (120 lbs) of force.

MicroDome G2 megapixel IP cameras deliver professional surveillance, with ease of installation and set-up, for a variety of network surveillance requirements. The remote focus module allows users to simply click “Short-range Focus” or “Full-range Focus” saving installers time and end users money—an easy return on investment. The three-axis lens adjustment provides users with more camera placement options, allowing the cameras to be easily mounted on a wall or ceiling so they can pan, tilt, and rotate the lens in a variety of directions for a precise field of view. An innovative spring arm design makes in-ceiling F-model installations a snap: simply slide the camera through the hole and secure the magnetized cover ring with a single screw. No additional hardware is required.

For challenging low-light applications, the 1.2MP model features NightView™, making it capable of covering areas where very little light is present. In addition, IR LEDs are available on surface mount configurations. For applications with strong backlighting, reflections from wet flooring/puddles, or contrast due to fog, mist, or glare, Enhanced WDR™ wide dynamic range is available on select 1080p and 3MP models.

The MicroDome G2 is ONVIF Profile S (Open Network Video Interface Forum) compliant, providing interoperability between network video products regardless of manufacturer.




Interchangeable Lenses with Remote Focus Module | Ultra Low Profile Design | SNAPstream™ Technology | NightView™ on 1.2MP Models | Enhanced WDR™ Wide Dynamic Range on Select 1080p and 3MP Models | IR LEDs (-IR Models) | True Day/Night with Mechanical IR Cut Filter | CorridorView™ with 90° Image Flip | Pixel Binning Mode on 3 and 5MP Models | All-in-One PoE and Integrated Lens | 3-Axis Gimbal | Impact / Weather Resistant IK-10 and IP66 Rated (-S Models) | Integrated Microphone (-F Models)

## Series Features

- 1.2, 1080p, 3, or 5MP Models
- SNAPstream™ (Smart Noise Adaptation and Processing) Capability to Reduce Bandwidth without Impacting Image Quality
- Strong Low Light Performance via NightView™ on 1.2MP Cameras and Binning Mode on 3MP and 5MP Cameras
- True Day/Night Functionality with Mechanical IR Cut Filter
- Enhanced WDR™ up to 100dB at Full Resolution: See Clearly in Shaded and Bright Light Conditions Simultaneously on Select 1080p and 3MP Models
- Casino Mode™ Maintains 30fps or Higher Required by Gaming Industry Regulations (Select 1080p Models)
- CorridorView™ Allows 90° Image Rotation for Better Coverage in Hallways and Corridors
- Dual Encoder H.264/MJPEG
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control, Multi-Streaming, Multicasting, and Forensic Zooming
- Remote Focus Module
- Multiple Lens Options Available (Sold Separately)
- Optional IR LEDs (IR Models)
- Easily Adjustable 3-Axis Gimbal
- Network Protocols Include 802.1x, IPv6, QoS, DHCP, and More
- All-in-One H.264 Total Power Over Ethernet (PoE) Solution
- Spring-Arm Design for Very Easy Installation (-F Models)
- Ultra Low Profile Design / Small Size
- Tamper-Resistant Housing
- IK-10 Impact-Resistant Housing Outdoor Rated IP66 (-S Models)
- Integrated Microphone (-F Models)


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ONVIF S

## Camera Imaging Specifications

| Model | | AV1555DN | AV2555DN | AV2556DN | AV3555DN | AV3556DN | AV5555DN |
|---|---|---|---|---|---|---|---|
| Image Sensor (CMOS) | | 1.2MP | 1080p (2.1MP) | 1080p (2.1MP) | 3MP | 3MP | 5MP |
| Optical Format | | 1/3" | 1/3" | 1/3.2" | 1/3" | 1/3.2" | 1/2.5" |
| Pixel Pitch | | 3.75µm | 2.2µm | 2.2µm | 2.2µm | 2.2µm | 2.2µm |
| Minimum Illumination | Color (Day Mode) | 0.03 Lux | 0.2 Lux | 0.2 Lux | 0.2 Lux | 0.2 Lux | 0.3 Lux |
| | Color Binning (Day Mode) | - | - | - | 0.1 Lux | 0.1 Lux | 0.15 Lux |
| | B/W (Night Mode) | 0.003 Lux, IR sensitive | 0.02 Lux, IR sensitive | 0.02 Lux, IR sensitive | 0.02 Lux, IR sensitive | 0.02 Lux, IR sensitive | 0.03 Lux, IR sensitive |
| Full FOV Resolution | | 1280 H x 960 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 480 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 | | 83.5dB | 69.5dB | WDR up to 100dB | 69.5dB | WDR up to 100dB | 70.1dB |
| Frame Rates* | At Max Res. | 37fps (1280 x 960) | 30fps (1920 x 1080) | 30fps (1920 x 1080) | 21fps (2048 x 1536) | 21fps (2048 x 1536) | 14fps (2592 x 1944) |
| | Cropped | - | 30fps (1280 x 1024) | 30fps (1280 x 1024) | 30fps (1920 x 1080)<br>30fps (1280 x 1024) | 30fps (1920 x 1080)<br>30fps (1280 x 1024) | 21fps (2048 x 1536)<br>29fps (1920 x 1080)<br>41fps (1280 x 1024) |
| | Binning Mode | - | - | - | 46fps (1024 x 768)<br>64fps (960 x 540) | 21fps (1024 x 768)<br>21fps (800 x 600)<br>21fps (960 x 540)<br>21fps (640 x 512) | 34fps (1296 x 972)<br>46fps (1024 x 768)<br>64fps (960 x 540) |
| Lens** | Fixed Iris | **MPM2.8A** 2.8mm, 1/2.5", F/1.8, IR corrected, M12-mount | | | | | |
| | H-FOV | 95° | 83° | 83° | 89° | 89° | 113° |

* Maximum with H.264 compression ** 2.8mm standard lens

## Programmability

| | | |
|---|---|---|
| **Optics** | M12 lens and remote focus module | |
| **Low Light Performance** | **NightView™ Mode** | 1.2MP models |
| | **Pixel Binning Mode** | 3MP and 5MP 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 (AV2555 model) | |
| **Flexible Cropping** | Resolution windowing down to 1x1 pixel for JPEG and 2x2 pixels for H.264 | |
| **Backlight Compensation** | Custom white balance | |
| **Flicker Control** | 5Hz–255Hz adjustable | |
| **Image Rotation** | CorridorView™ (90°, 180°, and 270° image rotation) | |
| **Wide Dynamic Range** | Auto adjustment between WDR and LDR modes (WDR models only) | |
| **Microphone** | Integrated (-F models) | |
| **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) | |

## Audio Electrical

| | |
|---|---|
| **Compression** | G.711 PCM 8 kHz |
| **Input** | Microphone in (integrated on -F models) |

## Data Transmission

| | |
|---|---|
| **Compression Type** | H.264 (MPEG-4, Part 10)/Motion JPEG |
| | 21 levels of quality |
| **Network Protocols** | HTTP, IPv4, IPv6, QoS, 802.1x, RTSP, RTP/TCP, RTP/UDP, TFTP, DHCP |
| **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) (-S model), IK-10 |
| **CoO** | Made in the USA |

## Environmental

| | | |
|---|---|---|
| **Operating Temperature** | **-F Model** | -5°C (23°F) to +50°C (122°F) |
| | **-S Model** | -40°C (-40°F) to +50°C (122°F) |
| **Humidity** | 0% to 90% (non-condensing) | |
| **Storage Temperature** | -20°C (-4°F) to +60°C (140°F) | |

## Electrical

| | |
|---|---|
| **Alarm Input/Output** | General purpose opto-coupled, 1 input/1 output |
| **Power Over Ethernet** | PoE 802.3af, Class 2 |

*See Next Page for Power Consumption and Mechanical Specs*



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## Max Power Consumption (Watts DC power)

| Model | AV1555/AV2555 | AV2556/AV3556 | AV3555/AV5555 |
|---|---|---|---|
| DN | 4.4 | 5.5 | 5.0 |
| DNIR | 4.6 | 5.7 | 5.2 |

## Mechanical

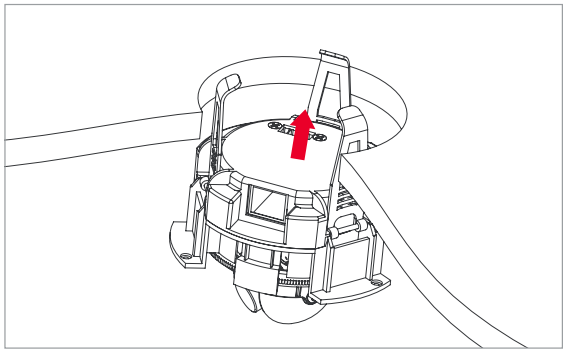
| | | |
|---|---|---|
| **Casing** | Tamper-resistant housing, IK-10 impact-resistant | |
| | **-F Model** | In-ceiling mount with die-cast aluminum cover and 2" polycarbonate dome bubble |
| | **-S Model** | Surface mount with die-cast aluminum housing and 2" polycarbonate dome bubble |
| | | IP66 weather proof standard |
| | | 3/8" NPT w/ 1/2" NPT adapter included |
| **Lens** | 2.8mm board mount (M12), fixed iris, F/1.8 (except -NL models) | |
| **Gimbal** | Easy 3-axis camera adjustment w/ 359° pan and 90° tilt and 360° z-axis | |
| **Dimensions** *(See Dimensions)* | **Unit** | Ø 4" (100mm) x 3.1" H (78.5mm) |
| | **Packaged** | 5.6" W (142mm) x 5.6" L (142mm) x 3.5" H (90mm) |
| **Weight** | **Unit** | 0.95lbs (0.43kg) |
| | **Packaged** | 1.3lbs (0.6kg) |

## IR Illuminator

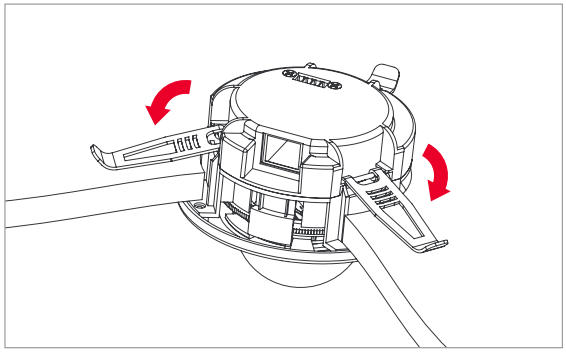
| |
|---|
| 3 pcs 850nm LEDs / 50ft (15m) IR distance (max) / 80° IR angle |
| Total PoE Solution (No external power requirement) |

## Quick Installation (Flush mount models)

**1** Push the three spring actuated retention arms in the upward position.

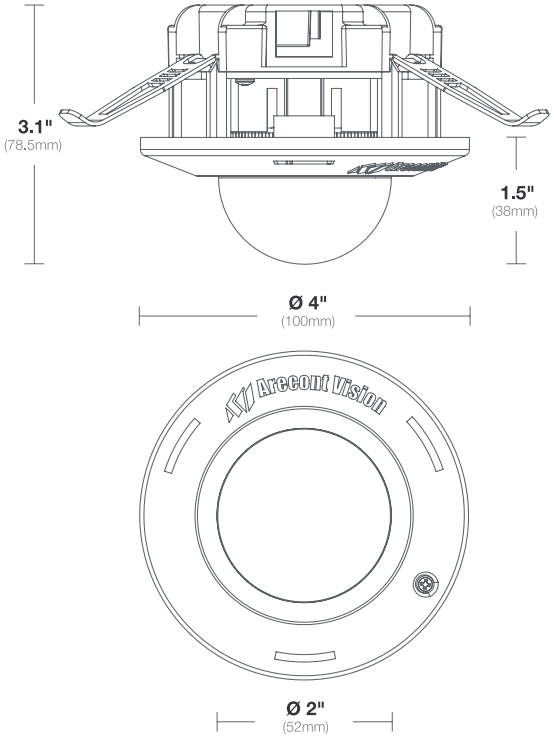


**2** The retention arms lock into place.

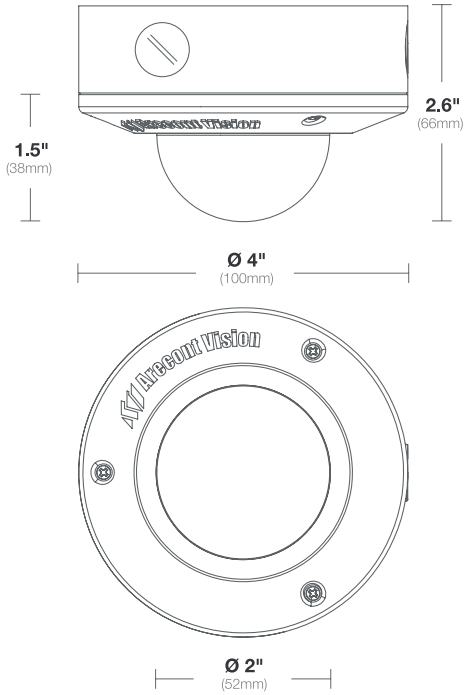


## Dimensions

### Flush Mount




### Surface Mount




*See Next Page for Ordering Information*

# MicroDome® G2 IP Megapixel Cameras

# Ordering Information



## Model Specific Features

| Model | Resolution | Frame Rate* | Features | | |
|---|---|---|---|---|---|
| **AV1555DN** | 1.2MP | 37fps | - | - | NightView™ |
| **AV2555DN** | 1080p | 30fps | - | Casino Mode™ | - |
| **AV2556DN** | 1080p | 30fps | WDR | - | - |
| **AV3555DN** | 3MP | 21fps | - | - | Binning |
| **AV3556DN** | 3MP | 21fps | WDR | - | Binning |
| **AV5555DN** | 5MP | 14fps | - | - | Binning |

* Maximum with H.264 compression

## Options

| | |
|---|---|
| **-F** | Flush Mount |
| **-S** | Surface Mount |
| **IR** | IR LEDs |
| **-NL** | No Lens |

## Configurations



Flush Mount (-F)



Surface Mount (-S)



Surface Mount with IR LEDs (-IR-S)

## Model Numbers

| | | |
|---|---|---|
| **1.2MP** | AV1555DN-F NightView™ | AV1555DN-F-NL NightView™ |
| | AV1555DN-S NightView™ | AV1555DN-S-NL NightView™ |
| | AV1555DNIR-S NightView™ | AV1555DNIR-S-NL NightView™ |
| **1080p** | AV2555DN-F | AV2555DN-F-NL |
| | AV2555DN-S | AV2555DN-S-NL |
| | AV2555DNIR-S | AV2555DNIR-S-NL |
| | AV2556DN-F WDR | AV2556DN-F-NL WDR |
| | AV2556DN-S WDR | AV2556DN-S-NL WDR |
| | AV2556DNIR-S WDR | AV2556DNIR-S-NL WDR |
| **3MP** | AV3555DN-F | AV3555DN-F-NL |
| | AV3555DN-S | AV3555DN-S-NL |
| | AV3555DNIR-S | AV3555DNIR-S-NL |
| | AV3556DN-F WDR | AV3556DN-F-NL WDR |
| | AV3556DN-S WDR | AV3556DN-S-NL WDR |
| | AV3556DNIR-S WDR | AV3556DNIR-S-NL WDR |
| **5MP** | AV5555DN-F | AV5555DN-F-NL |
| | AV5555DN-S | AV5555DN-S-NL |
| | AV5555DNIR-S | AV5555DNIR-S-NL |

## Lens Options (Sold separately)

| Model | Focal Length | Horizontal Field of View | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1.2MP | 1080p | 1080p WDR | 3MP | 3MP WDR | 5MP |
| **MPM2.1** | 2.1mm | 130° | 113° | 113° | 121° | 121° | - |
| **MPM2.8A**[1] | 2.8mm | 95° | 83° | 83° | 89° | 89° | 113° |
| **MPM4.0A** | 4mm | 67° | 59° | 59° | 63° | 63° | 80° |
| **MPM6.0** | 6mm | 46° | 40° | 40° | 43° | 43° | 56° |
| **MPM8.0** | 8mm | 35° | 30° | 30° | 33° | 33° | 42° |
| **MPM12.0A** | 12mm | 23° | 20° | 20° | 22° | 22° | 28° |
| **MPM16.0** | 16mm | 17° | 15° | 15° | 16° | 16° | 20° |

## Accessories (-S models only)

| | |
|---|---|
| **AV-CRMA** | Corner Mount Adapter |
| **AV-JBA**[2] | Standard Junction Box |
| **AV-PMA** | Pole Mount Adapter |
| **MCD-CMT** | Pendant Mount with 1/2" NPT Standard for MicroDome® Series |
| **MCD-CRMT** | In-room Corner Mount Adapter for MicroDome Series |
| **MCD-EBA** | Round Electrical Box Adapter Plate for MicroDome Series |
| **MCD-JBAS** | Mount Plate for MicroDome Series for use with AV-JBA |
| **MCD-WMT** | Wall Mount with 1/2" NPT Standard for MicroDome Series |
| **MCD-4S** | Electrical Box Surface Mount Cover Fits 3rd Party 4-inch Square Box 2-1/8 Inch Deep (e.g. Lowe's® Item # 4788) for MicroDome Series |

## Create Your Model (Example: **AV2556DNIR-S-NL**)

| | Megapixel Resolution | Body Generation | Body Type | Compression | True Day/Night | Infrared | Mount Type | Lens |
|---|---|---|---|---|---|---|---|---|
| **AV** | 1<br>2<br>3<br>5 | 5[3] | 5[3] | 5 H.264<br>6 H.264 + WDR[4] | DN True Day/Night | (blank) Non-IR<br>IR IR LEDs[5] | F Flush Mount<br>S Surface Mount | (blank) 2.8mm Lens<br>NL No Lens |

[1] Standard lens for MicroDome G2 except on "-NL" models
[2] Use with MCD-JBAS
[3] "55" represents MicroDome G2 product line
[4] WDR for AV2556 and AV3556 models only
[5] Surface mount models only

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