

# MicroDome™

H.264 All-in-One Ultra Low Profile Day/Night Indoor or Indoor/Outdoor IP Cameras  
(WDR option in 1080p and 3MP)



Arecont Vision introduces MicroDome™ megapixel IP cameras. These small, ultra low profile cameras offer the great features of Arecont Vision megapixel technology like superior image quality, excellent compression and fast frame rates. MicroDome™ is available in both recessed and surface mount configurations. An innovative spring arm design makes recessed installation a snap: simply slide the camera through the hole and secure the magnetized cover ring with a single screw. Every model comes equipped with a mechanical day/night switcher, and pixel binning on 3- and 5-megapixel models deliver excellent low-light capabilities. Add optional true Wide Dynamic Range (WDR) and difficult lighting conditions are overcome with MicroDome™.



Ultra Low Profile Design



All-in-One PoE and Integrated Lens



True Day/Night with Mechanical IR Cut Filter



Integrated Microphone (-F Models)



Vandal and Weather Proof IK-10 and IP66 Rated



Pixel Binning Mode on 3 and 5MP Models



Wide Dynamic Range Available on AV2456 and AV3456 Models



Casino Mode™ Maintains at Least 30fps on AV2455 Models



Dual Encoder H.264/MJPEG

## Features:

- Ultra Low Profile Design / Small Size
- Very Easy Installation / Factory Focused
- All-in-One H.264 Total Power over Ethernet (PoE) Solution with Integrated 4mm 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
- Multiple Lens Options Available (sold separately)
- Integrated Microphone (-F Models)
- Casino Mode™ Guarantees Continuous 30fps Frame Rate Required by Gaming Industry Regulations (AV2455 Models)
- Binning Mode for Strong Low Light Performance in 3MP and 5MP Resolutions
- True Day/Night Functionality with Mechanical IR Cut Filter (DN Models)
- Tamper-Resistant Housing
- IP66 (-S Models) and IK-10 Vandal-Resistant Housing
- Dual Encoder H.264/MJPEG
- Privacy Mask, 1024 Zone, 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

|          |       |             |       |     |              |         |
|----------|-------|-------------|-------|-----|--------------|---------|
| AV1455DN | 1.3MP | 1280 x 1024 | 42fps | -   | -            | -       |
| AV2455DN | 1080p | 1920 x 1080 | 31fps | -   | Casino Mode™ | -       |
| AV2456DN | 1080p | 1920 x 1080 | 30fps | WDR | -            | -       |
| AV3455DN | 3MP   | 2048 x 1536 | 21fps | -   | -            | Binning |
| AV3456DN | 3MP   | 2048 x 1536 | 21fps | WDR | -            | Binning |
| AV5455DN | 5MP   | 2592 x 1944 | 14fps | -   | -            | Binning |

|    |             |    |               |
|----|-------------|----|---------------|
| -F | Flush Mount | -S | Surface Mount |
|----|-------------|----|---------------|

(Example: AV2456DN-F)



## Camera Imaging Specifications

| Camera Imaging Specifications |               |                       |                       | WDR                   |                                            | WDR                                                                               |                                                                   |
|-------------------------------|---------------|-----------------------|-----------------------|-----------------------|--------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------|
| Model                         |               | AV1455DN              | AV2455DN              | AV2456DN              | AV3455DN                                   | AV3456DN                                                                          | AV5455DN                                                          |
| Image Sensor (CMOS)           |               | 1.3MP                 | 1080p                 | 1080p                 | 3MP                                        | 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         | 0.1 Lux               | 0.1 Lux               | 0.3 Lux               | 0.3 Lux                                    | 0.5 Lux                                                                           | 0.5 Lux                                                           |
|                               | Color Binning | -                     | -                     | -                     | 0.15 Lux                                   | 0.15 Lux                                                                          | 0.15 Lux                                                          |
|                               | Day/Night     | 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                                                            |
| Lens                          |               | 4mm Integrated, F/1.6 | 4mm Integrated, F/1.6 | 4mm Integrated, F/1.6 | 4mm Integrated, F/1.6                      | 4mm Integrated, F/1.6                                                             | 4mm Integrated, F/1.6                                             |
| 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)<br>41fps (1280 x 1024) | 30fps (1920 x 1080)<br>41fps (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>27fps (800 x 600)<br>31fps (960 x 540)<br>32fps (640 x 512) | 34fps (1296 x 972)<br>46fps (1024 x 768)<br>64fps (960 x 540)     |

## Data Transmission

|                        |                                          |
|------------------------|------------------------------------------|
| Compression Type       | H.264 (MPEG-4, Part 10)/Motion JPEG      |
|                        | 21 levels of quality                     |
| Transmission Protocols | RTSP, RTP/TCP, RTP/UDP, HTTP, TFTP, DHCP |
| Data Rate              | Bit rate control from 100Kbps–10Mbps     |
|                        | 100Base-T Ethernet Network Interface     |
| Multi-Streaming        | 8 non-identical streams                  |

## Programmability

|                                                                                              |
|----------------------------------------------------------------------------------------------|
| Motion Detection and privacy mask with 1024 detection zones                                  |
| Shutter Speed: 1ms – 500ms                                                                   |
| Pixel Binning Mode (3MP and 5MP models)                                                      |
| Auto adjust between WDR and LDR modes (WDR models)                                           |
| Casino Mode™ maintains 30fps (AV2455 model)                                                  |
| MoonLight™ Mode: extended exposure and proprietary noise cancellation                        |
| 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

|                       |                                                                    |
|-----------------------|--------------------------------------------------------------------|
| Industry Standard     | 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, EN60950-1 |
| Mechanical (-S Model) | IP66 (EN60529)                                                     |

## Environmental

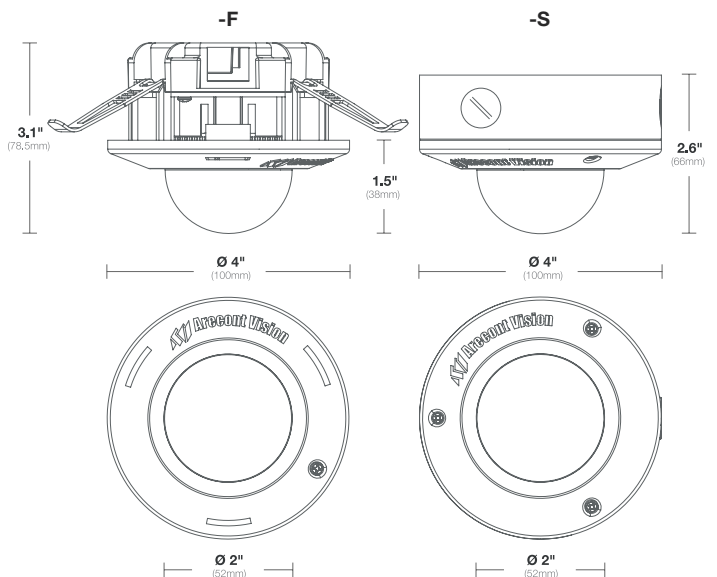
|                          |          |                                |
|--------------------------|----------|--------------------------------|
| Operating Temperature    | -F Model | -5°C (23°F) to +50°C (122°F)   |
|                          | -S Model | -40°C (-40°F) to +50°C (122°F) |
| Humidity                 |          | 0% to 90% (non-condensing)     |
| Stable Image Temperature |          | 0°C (32°F) to +50°C (122°F)    |
| Storage Temperature      |          | -20°C (-4°F) to +60°C (140°F)  |

## Electrical

|                       |                              |
|-----------------------|------------------------------|
| Input/Output          | General purpose opto-coupled |
| Power Over Ethernet   | PoE 802.3af, Class 3         |
| Max Power Consumption | 5.59 Watts                   |

## Mechanical

|            |                                                        |                                                                                |
|------------|--------------------------------------------------------|--------------------------------------------------------------------------------|
| Casing     | IK-10 Vandal-resistant and tamper-resistant housing    |                                                                                |
|            | -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<br>3/8" NPT w/ 1/2" NPT Adapter included           |
| Lens       | 4mm board mount (M12), fixed iris, F/1.6               |                                                                                |
| Gimbal     | Easy 2 axis camera adjustment w/ 359° pan and 90° tilt |                                                                                |
| Dimensions | Ø 4" (100mm) x 3.1" H (78.5mm)                         |                                                                                |
| Weight     | Unit                                                   | 0.7lbs (1.27kg)                                                                |
|            | Packaged                                               | 1.3lbs (1.54kg)                                                                |



## Lens Options

| Focal Length | 2.8mm              | 4mm      | 6mm                | 8mm                | 12mm               | 16mm               |
|--------------|--------------------|----------|--------------------|--------------------|--------------------|--------------------|
| Horiz. FOV   | 1.3MP              | 71       | 53                 | 35                 | 26                 | 13                 |
|              | 1080p              | 106      | 79                 | 52                 | 39                 | 20                 |
|              | 1080p WDR          | 83       | 59                 | 42                 | 31                 | 15                 |
|              | 3MP                | 90       | 66                 | 46                 | 34                 | 17                 |
|              | 3MP WDR            | 88       | 63                 | 45                 | 33                 | 16                 |
|              | 5MP                | 114      | 83                 | 58                 | 43                 | 22                 |
| Option       | Ordered Separately | Standard | Ordered Separately | Ordered Separately | Ordered Separately | Ordered Separately |
| Part Number  | MPM2.8             | -        | MPM6.0             | MPM8.0             | MPM12.0            | MPM16.0            |