

MicroDome® IP Megapixel Cameras

H.264 All-in-One Ultra Low Profile True Day/Night Indoor or Indoor/Outdoor Dome IP Cameras with WDR (Wide Dynamic Range) Models



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)



Impact / Weather Resistant IK-10 and IP66 Rated (-S Models)



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:

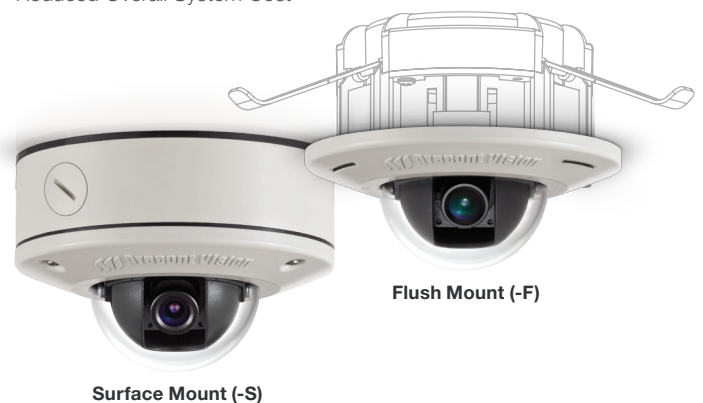
- 1.3–5MP Models
- Ultra Low Profile Design / Small Size
- Very Easy Installation / Factory Focused
- Multiple Lens Options Available (Sold Separately)
- Integrated Microphone (-F Models)
- Optional True WDR up to 100dB at Full Resolution Available on Some 1080p and 3MP Models: See Clearly in Shaded and Bright Light Conditions Simultaneously
- True Day/Night Functionality with Mechanical IR Cut Filter (DN Models)
- Binning Mode for Strong Low Light Performance on 3MP and 5MP Cameras
- Casino Mode™ Guarantees Continuous 30fps Frame Rate Required by Gaming Industry Regulations (AV2455 Models)
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control, Multi-Streaming and Forensic Zooming
- Dual Encoder H.264/MJPEG
- All-in-One H.264 Total Power Over Ethernet (PoE) Solution with Integrated 4mm Lens or No Lens (-NL Models) Allowing the User to Select the Appropriate Lens for the Specific Application
- Outdoor Rated IP66 and IK-10 Impact-Resistant Housing (-S Models)
- Tamper-Resistant Housing
- Fast Frame Rates
- New User-Friendly Web Interface
- Reduced Overall System Cost

Model Specific Features

Model	Resolution	Frame Rate	Features		
AV1455DN	1.3MP	42fps	-	-	-
AV2455DN	1080p	31fps	-	Casino Mode™	-
AV2456DN	1080p	30fps	WDR	-	-
AV3455DN	3MP	21fps	-	-	Binning
AV3456DN	3MP	21fps	WDR	-	Binning
AV5455DN	5MP	14fps	-	-	Binning

-F	Flush Mount	-S	Surface Mount	-NL	No Lens
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(Example: AV2456DN-F-NL)



Flush Mount (-F)

Surface Mount (-S)



Camera Imaging Specifications

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
	Color Binning	-	-	-	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
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, 1/2.5", F/1.6, H-FOV = 53°	4mm Integrated, 1/2.5", F/1.6, H-FOV = 81°	4mm Integrated, 1/2.5", F/1.6, H-FOV = 59°	4mm Integrated, 1/2.5", F/1.6, H-FOV = 63°	4mm Integrated, 1/2.5", F/1.6, H-FOV = 63°	4mm Integrated, 1/2.5", F/1.6, H-FOV = 80°
Frame Rates	At Max Res.	42fps (1280 x 1024)	31fps (1920 x 1080)	30fps (1920 x 1080)	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)	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)

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	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, EN60950-1
Mechanical (-S Model)	IP66 (EN60529)

Environmental

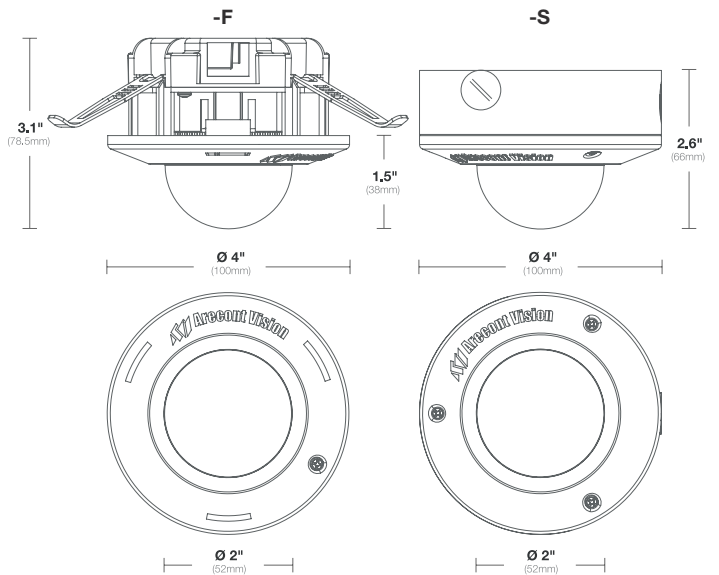
Operating Temperature	-F Model	-5°C (23°F) to +50°C (122°F)
	-S Model	-40°C (-40°F) to +50°C (122°F)
Humidity	0% to 90% (non-condensing)	
Stable Image Temperature	0°C (32°F) to +50°C (122°F)	
Storage Temperature	-20°C (-4°F) to +60°C (140°F)	

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 Impact-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
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 (0.3kg)
	Packaged	1.3lbs (0.6kg)



Lens Options

Focal Length	2.8mm	4mm	6mm	8mm	12mm	16mm
Horiz. FOV	1.3MP	75	53	36	28	18
	1080p	114	81	56	42	28
	1080p WDR	83	59	40	30	20
	3MP	89	63	43	33	22
	3MP WDR	89	63	43	33	22
5MP	113	80	55	40	28	20
Option	Ordered Separately	Standard*	Ordered Separately	Ordered Separately	Ordered Separately	Ordered Separately
Part Number	MPM2.8A	MPM4.0A	MPM6.0	MPM8.0	MPM12.0A	MPM16.0

* Except for -NL Models