

MegaDome® 4K IP Megapixel Cameras

8.3 Megapixel (MP) H.264 Motorized P-Iris Lens True Day/Night Indoor/Outdoor Dome IP Cameras



The 8.3MP/1080p MegaDome® 4K dual mode network camera is the new generation of Arecont Vision's MegaDome cameras. This fully compliant implementation of H.264 (MPEG-4, Part 10) provides full 3840 x 2160 megapixel resolution at full video frame rates of 30 frames per second (fps) at 8MP and 60fps while in 1080p binning mode. The MegaDome 4K camera series provides an all-in-one solution with integrated 8.3MP day/night camera, remote focus, remote zoom, P-Iris, 4.4–10mm lens, and SDHC card.

Features include SNAPstream™ (Smart Noise Adaptation and Processing) to reduce bandwidth without impacting image quality, scaling, binning mode, privacy masking, extended motion detection, flexible cropping, and Power over Ethernet (PoE - IEEE 802.3af). Built with Arecont Vision massively-parallel MegaVideo® processing technology, the camera series offers more than 27-times the resolution of standard resolution IP cameras. It offers the ability to output full real-time frame rates and deliver high-quality megapixel imaging for both indoor and outdoor applications.



4K Resolution



Integrated Motorized Lens with Remote Focus and Zoom



P-Iris Control for Best Depth of Field and Image Clarity



Dual Mode 4K/1080p



SNAPstream™ Technology



True Day/Night with IR Cut Filter



Pixel Binning Mode



Adjustable IR LEDs



SDHC Card Slot



Installer Friendly



Non-Integer Scaling



All-in-One PoE and Integrated Lens

Series Features

- 8.3 Megapixels at 30fps
- 4K/1080p Dual Mode with 1080p at 60fps
- SNAPstream™ Capability to Reduce Bandwidth without Impacting Image Quality
- Remote Focus/Zoom P-Iris Lens
- P-Iris Control to Get Best Depth of Field and Image Clarity
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control, Multi-Streaming, Multicasting, Forensic Zooming, and Non-Integer Scaling
- Dual Encoder H.264/MJPEG
- True Day/Night Functionality with Mechanical IR Cut Filter
- Binning Mode for Strong Low Light Performance
- MoonLight™ Mode for Extended Exposure and Noise Cancellation
- Network Protocols Include HTTPS, 802.1x, IPv4, DHCP, and More
- IR LEDs with Adjustable Beam Angle and LED Intensity
- SDHC Card Slot for Onboard Storage (SD Card Sold Separately)
- Total PoE Solution (No External Power Required for IR LEDs) with Auxiliary Power: 12–24V DC
- Easily Adjustable 3-Axis Gimbal

Camera Imaging Specifications

Model		AV08ZMD-400
Image Sensor (CMOS)		8.3MP
Optical Format		1/1.7"
Pixel Pitch		1.85µm
Minimum Illumination	Color (Day Mode)	0.5 Lux
	Color Binning (Day Mode)	0.25 Lux
	B/W (Night Mode)	0.02 Lux, IR sensitive
Full FOV Resolution		3840 H x 2160 V
1/4 Resolution		1920 H x 1080 V
Scaling (See <i>Scaling Resolution Chart Below</i>)		Yes
Dynamic Range		70.7dB
Maximum SNR		40.1dB
Frame Rates	At Maximum Resolution	30fps (3840 x 2160)
	Binning Mode	60fps (1920 x 1080)
Lens		4.4–10mm Integrated, 1/1.7", F/1.2, H-FOV = 96°–43°

SituationalPlus™

Model	Lens	View Angle	Distance to pixel density (ft.)(m)					
			30ppf-T (100ppm)	30ppf-W (100ppm)	60ppf-T (200ppm)	60ppf-W (200ppm)	90ppf-T (300ppm)	90ppf-W (300ppm)
AV08ZMD-400	4.4–10mm	43°–96°	170' (51.8m)	61' (18.6m)	86' (26.2m)	28.5' (8.7m)	56.5' (17.2m)	16.5' (5.0m)

Scaling Resolution Chart

Scaled Resolution	Horizontal	Vertical	Pixel Count
720p	1280	720	921600
XVGA	1024	768	786432
DVGA (16:9)	1136	640	727040
DVGA (3:2)	960	640	614400
SVGA	800	600	480000
D1 (PAL)	720	576	414720
4CIF (PAL)	704	576	405504
D1 (NTSC)	720	480	345600
4CIF (NTSC)	704	480	337920
VGA	640	480	307200
2CIF (PAL)	704	288	202752
HVGA (4:3)	480	360	172800
2CIF (NTSC)	704	240	168960
HVGA (8:3)	640	240	153600
HVGA (3:2)	480	320	153600
HVGA (16:9)	480	272	130560
CIF (PAL)	352	288	101376
CIF (NTSC)	352	240	84480
QVGA (SIF)	320	240	76800
QCIF (PAL)	176	144	25344
QCIF (NTSC)	176	120	21120
SQCIF	128	96	12288

Programmability

Optics	Remote focus, remote zoom and P-iris
Low Light Performance	MoonLight™ mode
	Pixel binning mode
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
Scaling	Non-integer scaling down to 128x96
Casino Mode™	Maintains 30fps or higher
SNAPstream™	Smart noise adaptation and processing
Flexible Cropping	Resolution windowing down to 1x1 pixel for JPEG and 2x2 pixels for H.264
Backlight Compensation	Multi-matrix white balance
Flicker Control	5 to 255Hz adjustable
Image Rotation	180° image flip
Noise Reduction	Low light noise filter control
Efficiency	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)

Data Transmission

Compression Type	H.264 MPEG-4, Part 10 ISO/IEC 14496-10 AVC
	21 levels of quality
Network Protocols	RTSP, RTP/TCP, RTP/UDP, HTTP1.0, HTTP1.1, TFTP, DHCP, HTTPS, IPv4, 802.1x
Network Interface	100/1000 Base-T Ethernet
Multi-Streaming	4 non-identical streams

Compliance

FCC Compliance	Title 47, Part 15 (47 CFR 15) Subpart B Class A
Environmental	REACH 1907/2006/EC, WEEE 2012/19/EU
Markings	CE: 2014/30/EU (EMC Directive), 2014/35/EU (Low Voltage Directive), 2011/65/EU (RoHS Directive) EN 55022:2010 Class A, EN 55024:2010, EN 61000-3-2:2006+A1:2009+A2:2009, EN61000-3-3: 2008 EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013
Networking Standard	IEEE 802.3af-2003 PoE Standard, Class 3, IPv4, HTTPS, 802.1x
CoO	Made in the USA

Environmental

Operating temperature	-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	-40°C (-40°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 3
Auxiliary Power	12-24V DC
Power Consumption	12.4W / 14.1W (IR on)

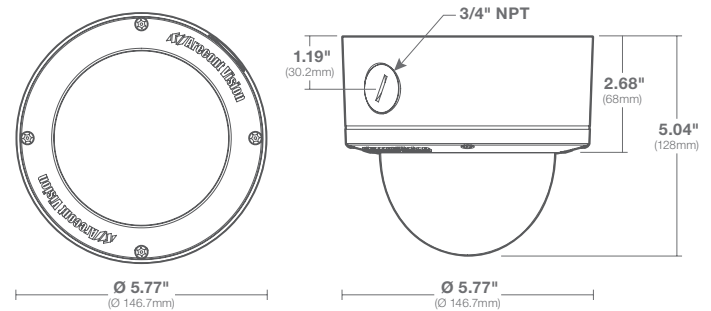
Mechanical

Casing	Die-cast aluminum chassis with 4" polycarbonate dome bubble	
Gimbal	Easily adjustable 3-axis camera gimbal w/360° pan, 77° tilt (w/ full field of view from mounting surface), and 180° z-axis	
Lens	2.8mm board mount (M12), fixed iris, F/2.0	
Dimensions <i>(See Dimensions)</i>	Unit	Ø 5.77" (146.7mm) x 5" H (128mm)
	Packaged	6" H (150mm) x 7.5" W (190mm) x 8" L (200mm)
Weight	Unit	2.25 lbs (1.02kg)
	Packaged	2.8 lbs (1.27kg)
On Board Storage	SDHC slot up to 32GB (Card not included)	

IR Illuminator

12 pcs 850nm LEDs with Adjustable IR / 50ft (15m) IR distance (max) / 60° and 80° IR angle
Total PoE Solution (No external power requirement)

Dimensions



Accessories

AV-CRMA	Corner Mount Adapter
AV-EBA	Electrical Box Adapter
AV-EBAR	Round Electrical Box Adapter
AV-JBA	Junction Box Adapter
AV-PMA	Pole Mount Adapter
AV-PMJB	Pendant Mount
AV-WMJB	Wall Mount Bracket
MD-CAP	Wall Mount and Cap Accessory

Ordering Information



Model Numbers

8.3MP	AV08ZMD-400
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Create Your Model (Example: AV08ZMD-400)

Megapixel Resolution Generation Body Type Compression

