

MegaDome® 4K IP Megapixel Camera

8.3 Megapixel (MP) H.264 Motorized P-Iris Lens True Day/Night Indoor/Outdoor Dome IP Camera with SNAPstream™ (Smart Noise Adaptation and Processing), NightView™, WDR (Wide Dynamic Range), and Adjustable IR



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, in an installer-friendly IP66 water/dust ingress rated housing, and vandal resistant, IK-10 rated dome enclosure.

Features include SNAPstream™ (Smart Noise Adaptation and Processing) to reduce bandwidth without impacting image quality, NightView™ and binning mode for strong low light performance, non-integer scaling, privacy masking, extended motion detection, flexible cropping, forensic zooming, multicasting 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.



Series Features

- 8.3 Megapixel 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
- WDR: See Clearly in Shaded and Bright Light Conditions Simultaneously
- NightView™ and Binning Mode for Strong Low Light Performance
- True Day/Night Functionality with Mechanical IR Cut Filter
- Dual Encoder H.264/MJPEG
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control, Multi-Streaming, Multicasting, Forensic Zooming, and Non-Integer Scaling
- Network Protocols Include SNMP, SNTP, HTTPS, 802.1x, IPv4, DHCP, and More
- IR LEDs with Adjustable Beam Angle and LED Intensity
- Total PoE Solution (No External Power Required for IR LEDs) with Auxiliary Power: 12–24V DC
- Outdoor Rated IP66 and IK-10 Impact-Resistant Housing
- Easily Adjustable 3-Axis Gimbal

* Maximum with H.264 compression

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)	0.03 Lux
	Color Binning (Day Mode)	0.015 Lux
	B/W (Night Mode)	0.003 Lux, IR sensitive
Full FOV Resolution		3840 H x 2160 V
1/4 Resolution (Half Resolution)		1920 H x 1080 V
Scaling (See <i>Scaling Resolution Chart Below</i>)		Yes
Dynamic Range		70.7dB (WDR)
Maximum SNR		40.1dB
Frame Rates*	Maximum Resolution	30fps (3840 x 2160)
	Half Resolution	60fps (1920 x 1080)
Lens		4.4–10mm Integrated, 1/1.7", F/1.2, H-FOV = 96°–43°

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, P-iris
Low Light Performance	NightView™ technology
	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
Flexible Cropping	Resolution windowing down to 1x1 pixel for JPEG and 2x2 pixels for H.264
Backlight Compensation	Multi-matrix white balance
Flicker Control	5Hz–255Hz adjustable
Image Rotation	180° image flip
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)

* Maximum with H.264 compression

** All scaled resolutions are available on all cameras that support scaling

Data Transmission

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

Compliance

Listings	UL CB Scheme: IEC 60950-1(Ed.2), IEC 60950-1(Ed.2); Am.1, IEC 60950-1(Ed.2); Am.2, IEC 60950-22(Ed.1)
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
Mechanical	IK-10 (EN62262), IP66 (EN60529)
CoO	Made in the USA

Environmental

Operating Temperature	-40°C (-40°F) to +50°C (122°F)
Humidity	0% to 90% (non-condensing)
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)

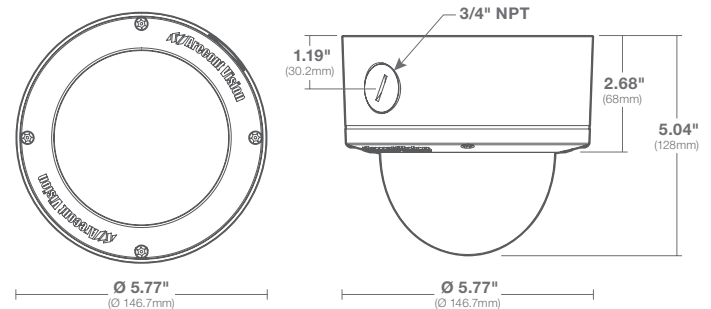
Mechanical

Casing	Die-cast aluminum chassis with 4" polycarbonate dome bubble
	IP66 weather proof standard
	Impact resistant, IK-10 rated
Gimbal	Easily adjustable 3-axis camera gimbal w/360° pan, 77° tilt (w/ full field of view from mounting surface), and 180° z-axis
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 2.25lbs (1.02kg)
	Packaged 2.8lbs (1.27kg)

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



See Next Page for Ordering Information



Accessories

AV-CRMA	Corner Mount Adapter
AV-FMA	Flush Mount Adapter
AV-JBA¹	Standard Junction Box
AV-PMA	Pole Mount Adapter
AV-PMJB	Pendant Mount Bracket with Standard Junction Box <i>(Fits Cap 1.5" NPT, Box Fits 3/4" NPT)</i>
AV-WMJB	Wall Mount Bracket with Standard Junction Box <i>(Fits Cap 1.5" NPT, Box Fits 3/4" NPT)</i>
MD-CAP	Mounting Cap for MegaDome® Series and SurroundVideo® G5 Mini
MD-JBA	Round Junction Box for MegaDome Series and SurroundVideo G5 Mini

¹ Replacement part for AV-PMJB and AV-WMJB

Model Numbers

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

Megapixel Resolution Generation Body Type Compression



² "Z" represents the platform

³ "MD" represents MegaDome product line

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Made in the USA

Rev 001.010

