A1 SECURITY CAMERAS
The First Name in Security

Arecont ˉi ®

Lea ing the Wa in Mega ixel Video™

MegaVideo® 4K IP Megapixel Camera

8.3 Megapixel (MP) H.264 True Day/Night Indoor Box-Style IP Camera with SNAPstream™ (Smart Noise Adaptation and Processing), NightView™, and WDR (Wide Dynamic Range)

Lens Sold Separately

The 8.3MP/1080p MegaVideo® 4K dual mode network camera is the new generation of Arecont Vision's MegaVideo 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 series combines a day/night mechanical IR cut filter with a choice of three ultra high definition P-iris lenses for precise, optimal image quality. MegaVideo 4K performs exceptionally well in very low-light thanks to NightView™, making it capable of covering areas where very little light is present.

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 processing technology, MegaVideo 4K 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.

The SDHC card slot supports up to 32GB of storage capacity for convenient onboard storage. The motorized remote focus/zoom lenses with P-iris control make set-up and maintenance easy. The camera's power can be supplied via a Power-over-Ethernet compliant network cable connection or with power from a 12–24V DC/24V AC power supply. The camera's interface allows for an intuitive, fast, and easy configuration.

4K Resolution	Motorized Remote Focus/Zoom Lens and Housing Options	P-Iris Control for Best Depth of Field and Image Clarity	Dual Mode 4K/1080p	SNAPstream™ Technology	NightView™	True Day/Night with IR Cut Filter	Pixel Binning Mode	Non-Integer Scaling	SDHC Card Slot

Series Features

- 8.3 Megapixel at 30fps[†]
- 4K/1080p Dual Mode with 1080p at 60fps[†]
- SNAPstream™ Capability to Reduce Bandwidth without Impacting Image Quality
- P-Iris Control for 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
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control, Multi-Streaming, Multicasting, Forensic Zooming, and Non-Integer Scaling

- Dual Encoder H.264/MJPEG
- Network Protocols Include SNMP, HTTPS, 802.1x, IPv4, DHCP, and More
- Many Remote Focus/Zoom Motorized, P-Iris Lenses to Choose From (Sold Separately)
- Small Size for Flexible Mounting Options
- 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/24V AC
- Use with Arecont Vision Housings or as a Standalone Camera

[†] Maximum with H.264 compression
[*] Applicable for outdoor use in HSG2 or HSG3 housings

Camera Imaging Specifications

Model		AV08ZMV-300
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		1920 H x 1080 V
Scaling (See Scaling Resolution Chart Below)		Yes
Dynamic Range		70.7dB (WDR)
Maximum SNR		40.1dB
Frame Rates†	At Maximum Resolution	30fps (3840 x 2160)
	Binning Mode	60fps (1920 x 1080)
Lens	P-iris	**UHD4.4-10MPI** 4.4–10mm, 1/1.7", F/1.2, P-iris, IR corrected, CS-mount, H-FOV = 43°–96°
		UHD12-50MPI 12–50mm, 1/1.7", F/1.8, P-iris, IR corrected, CS-mount, H-FOV = 9°–37°
		UHD30-120MPI 30–120mm, 1/1.7", F/2.2, P-iris, IR corrected, C-mount, H-FOV = 3.5°–13°

Situational**Plus**™

Lens Model	Lens Range	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)
UHD4.4-10MPI	4.4–10mm	43°–96°	164' (50m)	55.5' (17m)	79.5' (24.2m)	28' (8.5m)	54' (16.5m)	18.5' (5.6m)
UHD12-50MPI	12–50mm	9°–37°	805' (245m)	190' (58m)	405' (123m)	95' (29m)	270' (82m)	63.5' (19.4m)
UHD30-120MPI	30–120mm	3.5°–13°	1820' (555m)	570' (174m)	910' (277m)	280' (85m)	610' (186m)	187' (57m)

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

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

Programmability

Optics	Remote focus, remote zoom, and P-iris control (when remote focus/zoom lens is used)
Low Light Performance	NightView™
	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 (See Scaling Resolution Chart to the left)
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
Noise Reduction	Low light noise filter control
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

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, SNMP, HTTPS, IPv4, 802.1x
Network Interface	100/1000 Base-T Ethernet
Multi-Streaming	4 non-identical streams

Compliance

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
CoO	Made in the USA

Environmental

Operating Temperature	**PoE**	-5°C (23°F) to +45°C (113°F)
	Auxiliary Power	-5°C (23°F) to +40°C (104°F)
Humidity	0% to 90% (non-condensing)	
Storage Temperature	-20°C (-4°F) to +60°C (140°F)	

Electrical

Alarm Input/Output	1 input/1 output
Power Over Ethernet	PoE 802.3af, Class 3
Auxiliary Power	12–24V DC/24V AC
Power Consumption	10.7 watts max (auxiliary DC power)

Mechanical

Casing	Die-cast aluminum chassis	
	C/CS lens mount	
Dimensions *(See Dimensions)*	**Unit**	3" W (76mm) x 2.4" D (61mm) x 2.6" H (65mm) (w/o lens)
	Packaged	4.1" W (105mm) x 4.1" L (105mm) x 3.3" H (84mm)
Weight	**Unit**	0.62lbs (0.28kg) w/o lens
	Packaged	0.72lbs (0.33kg) w/o lens
On Board Storage	SDHC slot up to 32GB (Card not included)	

Dimensions
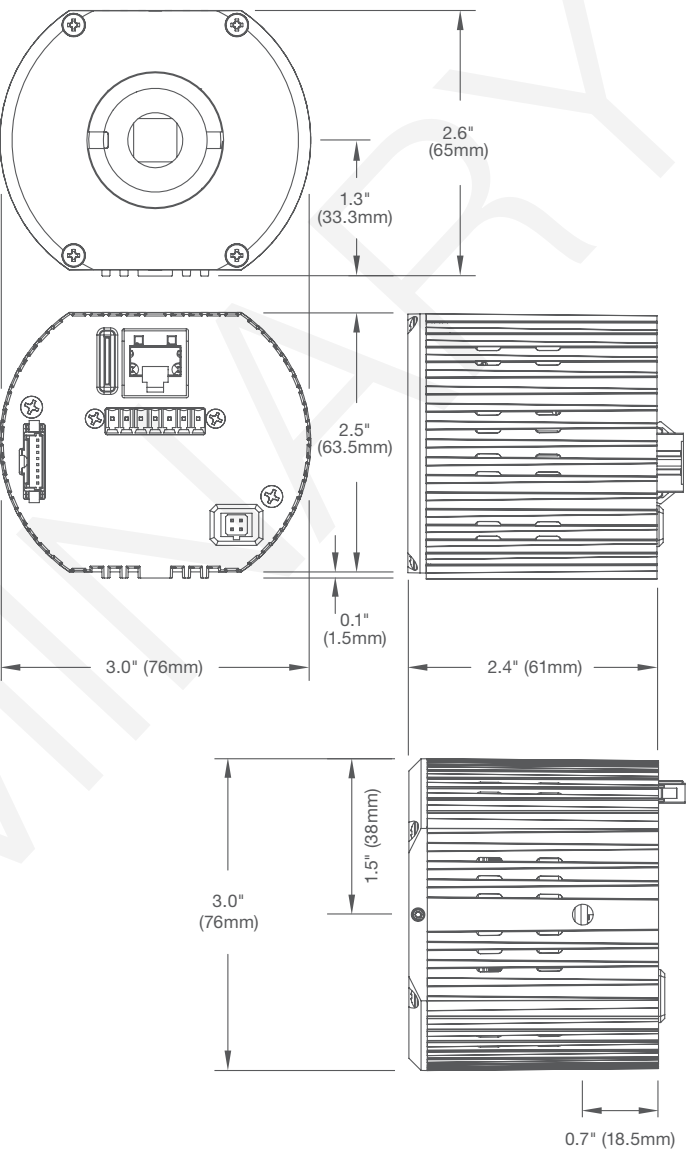
See Next Page for Ordering Information

Ordering Information

Model Numbers

8.3MP	AV08ZMV-300

Lens Options (Sold Separately)

Motorized P-Iris	UHD4.4-10MPI (4.4–10mm)
	UHD12-50MPI (12–50mm)
	UHD30-120MPI (30–120mm) [1]

Compatible Housings (Sold Separately)

HSG3 [1]	16" Outdoor PoE Bullet-Style Housing
HSG2	11" Outdoor PoE Bullet-Style Housing

HSG2 & HSG3 Housing Accessories (Sold Separately)

AV-PMA	Pole Mount Adapter
AV-CRMA	Corner Mount Adapter
AV-EBAS	Square Electrical Box Adapter Plate
AV-JBA	Standard Junction Box
HSG2-WMT	Wall Mount for HSG2 and HSG3 Housing

Create Your Model (Example: AV08ZMV-300)

	Megapixel Resolution	Generation	Body Type	Compression
AV	08	Z [2]	MV [3]	300
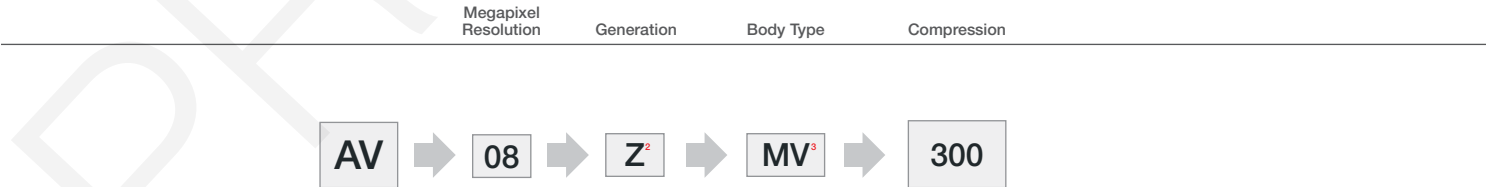
[1] HSG3 housing is required when using UHD30-120MPI lens for outdoor and impact-resistant applications

[2] "Z" represents the platform

[3] "MV" represents MegaVideo product line

Arecont i