Arecont Vision®

Leading the Way in Megapixel Video™

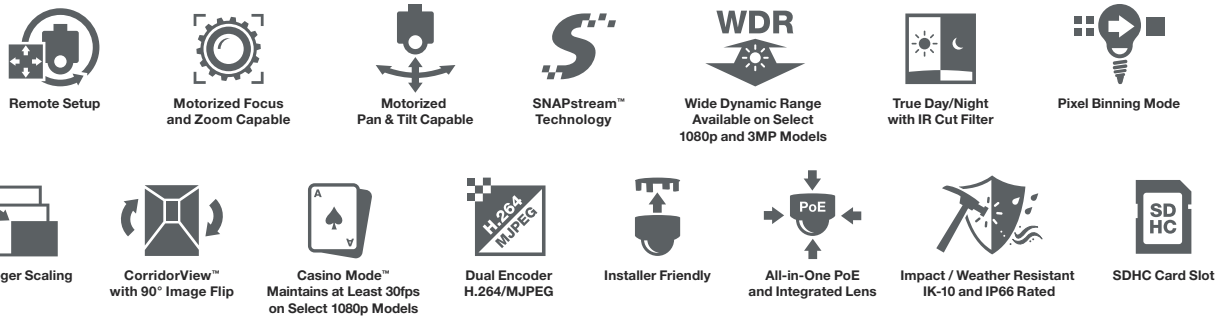
MegaDome® G3 RS IP Megapixel Cameras

1080p, 3, and 5 Megapixel (MP) H.264 All-in-One Remote Setup True Day/Night Indoor/Outdoor Dome IP Cameras with SNAPstream™ (Smart Noise Adaptation and Processing) and WDR (Wide Dynamic Range) Models

MegaDome® G3 RS third generation megapixel cameras provide ample resolution to zoom-in for details in live or recorded video. With an IR corrected motorized lens and gimbal, MegaDome G3 RS is easy to install and manage with "no-touch" remote setup. Install the magnetic mounting plate, connect the PoE (Power-over-Ethernet) IP cable, magnetically snap in place and fasten the camera to the mounting plate, and then remotely configure the camera. Use the intuitive interface to remotely pan, tilt, zoom, and focus the sensor.

These indoor/outdoor all-in-one solutions integrate a 1080p, 3 or 5-megapixel (MP) sensor with fast frame rates, and SNAPstream™ (Smart Noise Adaptation and Processing) technology to reduce bandwidth without impacting image quality. The True Day/Night mechanical IR cut filter provides the highest image quality at any time of day. Select 3MP models of MegaDome G3 RS include wide dynamic range (WDR), delivering up to 100dB at full resolution for applications with bright or over saturated lighting conditions. All models feature CorridorView™ for 90° image rotation, non-integer scaling, and an SDHC memory card slot for internal storage. The installer-friendly housing is IP66 rated for both indoor and outdoor applications and the cast-aluminum housing is IK-10 impact resistant, capable of withstanding the equivalent of 55 kg (120 lbs) of force.

The camera is integrated with the industry's leading VMS/NVR platforms. Using the camera interface or the AV IP Utility, security updates and both new or enhanced features can be applied to the cyber-hardened MegaDome G3 RS's Massively Parallel Image Processing (MPIP) architecture. This in house developed architecture runs on the Field Programmable Gate Array (FPGA) integrated circuit that is at the core of every Arecont Vision camera. The MegaDome G3 RS is ONVIF (Open Network Video Interface Forum) Series S compliant, providing interoperability between network video products regardless of manufacturer.



Series Features

- 1080p, 3, or 5MP Models
- Remote Setup – No Touch Setup with a Varifocal Motorized Lens that can be Remotely Setup in Any Position
- Remote Focus/Zoom Capable
- Motorized Pan and Tilt Capable – Pan 359°, Tilt 90°
- SNAPstream™ Capability to Reduce Bandwidth without Impacting Image Quality
- Optional True WDR up to 100dB at Full Resolution Available on Select 1080p and 3MP Models: See Clearly in Shaded and Bright Light Conditions Simultaneously
- Casino Mode™ Maintains 30fps or Higher Required by Gaming Industry Regulations (Select 1080p Models)
- True Day/Night Functionality with Mechanical IR Cut Filter
- Binning Mode for Strong Low Light Performance on 3MP and 5MP Cameras
- CorridorView™ Allows 90° Image Rotation for Better Coverage in Hallways and Corridors
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control, Multi-Streaming, Multicasting, Forensic Zooming and Non-Integer Scaling
- Dual Encoder H.264/MJPEG
- SDHC Card Slot for Onboard Storage
- Network Protocols Include HTTPS, 802.1x, DHCP, and More
- Total PoE Solution (No External Power Required for Heater), PoE and Auxiliary Power: 12–48V DC/24V AC
- Outdoor Rated IP66 and IK-10 Impact-Resistant Housing

ONVIF | S

Camera Specifications

Model		AV2355RS	AV2356RS	AV3355RS	AV3356RS	AV5355RS
Image Sensor (CMOS)		1080p	1080p*	3MP*	3MP	5MP
Day/Night		True Day/Night with Automatic Removable IR Cut Filter				
Optical Format		1/3"	1/3.2"	1/3"	1/3.2"	1/2.5"
Pixel Pitch		2.2µm	2.2µm	2.2µm	2.2µm	2.2µm
Minimum Illumination	Color (Day Mode)	0.2 Lux	0.2 Lux	0.2 Lux	0.2 Lux	0.3Lux
	Color Binning (Day Mode)	–	–	0.1 Lux	0.1 Lux	0.15 Lux
	B/W (Night Mode)	0.02 Lux, IR sensitive	0.02 Lux, IR sensitive	0.02 Lux, IR sensitive	0.02 Lux, IR sensitive	0.03 Lux, IR sensitive
Full FOV Resolution		1920 H x 1080 V	1920 H x 1080 V	2048 H x 1536 V	2048 H x 1536 V	2560 H x 1920 V
1/4 Resolution		960 H x 540 V	960 H x 540 V	1024 H x 768 V	1024 H x 768 V	1280 H x 960 V
Scaling *(See Scaling Resolution Chart Below)*		Yes	Yes	Yes	Yes	Yes
Dynamic Range		69.5dB	WDR up to 100dB	69.5dB	WDR up to 100dB	70.1dB
Maximum SNR		45dB	49dB	49dB	49dB	45dB
Frame Rates†	At Max Resolution	30fps (1920 x 1080)	30fps (1920 x 1080)	21fps (2048 x 1536)	21fps (2048 x 1536)	14fps (2560 x 1920)
	Cropped	30fps (1280 x 1024)	30fps (1280 x 1024)	30fps (1920 x 1080) 30fps (1280 x 1024)	30fps (1920 x 1080) 30fps (1600 x 1200) 30fps (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) 21fps (800 x 600) 21fps (960 x 540) 21fps (640 x 512)	34fps (1296 x 972) 46fps (1024 x 768) 64fps (960 x 540)
Lens	Wide Angle Motorized	2.8–6mm, 1/2.7", F2.0, RZ, RF, H-FOV = 88°–42°	2.8–6mm, 1/2.7", F2.0, RZ, RF, H-FOV = 88°–42°	2.8–6mm, 1/2.7", F2.0, RZ, RF, H-FOV = 94°–45°	2.8–6mm, 1/2.7", F2.0, RZ, RF, H-FOV = 94°–45°	3.3–6.6mm, 1/2.5", F1.7, RZ, RF, H-FOV = 102°–53°

* Effective

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
Low Light Performance	Pixel Binning Mode
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 (AV2355RS models)
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	CorridorView™ (90°, 180° and 270° image rotation)
Wide Dynamic Range	Auto adjustment between WDR and LDR modes (WDR models only)
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) / Motion JPEG
	21 levels of quality
Network Protocols	RTSP, RTP/TCP, RTP/UDP, HTTP, DHCP, TFTP, HTTPS, 802.1x
Network Interface	100Base-T Ethernet
Multi-Streaming	8 non-identical streams

Compliance

Industry Standard	ONVIF Profile S 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
Networking Standard	IEEE 802.3af-2003 PoE Standard, Class 3, IPv4, 802.1x
Mechanical	IK-10 (EN62262), IP66 (EN60529)
CoO	Made in the USA

Environmental

Operating temperature	-40°C (-40°F) to +50°C (122°F) With motor operation: -10°C (14°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	12–48V DC, 24V AC

Heater Electrical

Power Consumption	2.28W Max
Switch	On: 4°C (32.9°F), Off: 6.5°C (43.7°F)
Power Over Ethernet	Total PoE solution (No external power requirement)

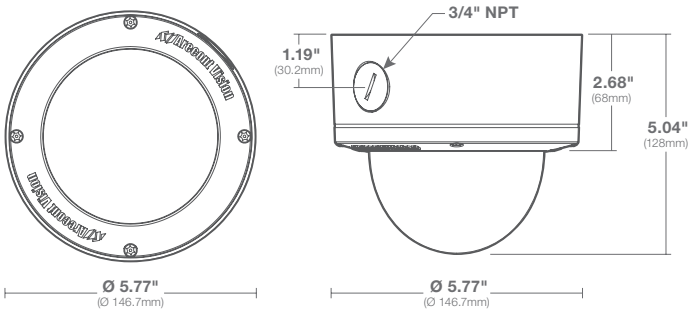
Max Power Consumption (Watts DC power)

AV2355RS	10.1W
AV2356RS	10.3W
AV3355RS	10.1W
AV3356RS	10.3W
AV5355RS	10.1W

Mechanical

Casing		Die-cast aluminum chassis with 4" polycarbonate dome bubble
		IP66 weather proof standard
		Impact resistant, IK-10 rated
Gimbal		359° pan, 90° tilt
Dimensions *(See Dimensions)*	**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 (1.02 kg)
	Packaged	2.8 lbs (1.27 kg)
On Board Storage		SDHC slot up to 32GB (Card not included)

Dimensions



Ordering Information

Model Specific Features

Model	Resolution	Frame Rate†	Features		
AV2355	1080p	30fps	-	Casino Mode™	-
AV2356	1080p	30fps	WDR	-	-
AV3355	3MP	21fps	-	-	Binning
AV3356	3MP	21fps	WDR	-	Binning
AV5355	5MP	14fps	-	-	Binning

Configurations

1080p or 3MP Model

5MP Model

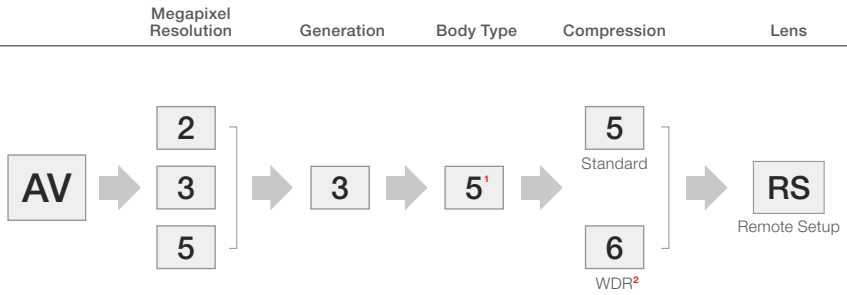
Model Numbers

1080p	AV2355RS	
	AV2356RS	WDR
3MP	AV3355RS	
	AV3356RS	WDR
5MP	AV5355RS	

Accessories (Sold Separately)

AV-CRMA	Corner Mount Adapter
AV-FMA	Flush Mount Adapter
AV-JBA	Standard Junction Box
AV-PMA	Pole Mount Adapter
AV-PMJB	Pendant Mount with Junction Box *(Fits Cap 1.5" NPT, Box Fits 3/4" NPT)*
AV-WMJB	Wall Mount Bracket with Junction Box *(Fits Cap 1.5" NPT, Box Fits 3/4" NPT)*
MD-2HK	Heater Kit
MD-CAP	Mounting Cap for MegaDome Series and SurroundVideo® G5 Mini
MD-JBA	Junction Box for MegaDome Series and SurroundVideo G5 Mini

Create Your Model (Example: **AV5355RS**)



[1] "5" represents MegaDome G3 product line
[2] WDR for AV2356 and AV3356 models only
† Maximum with H.264 compression

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