

# 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

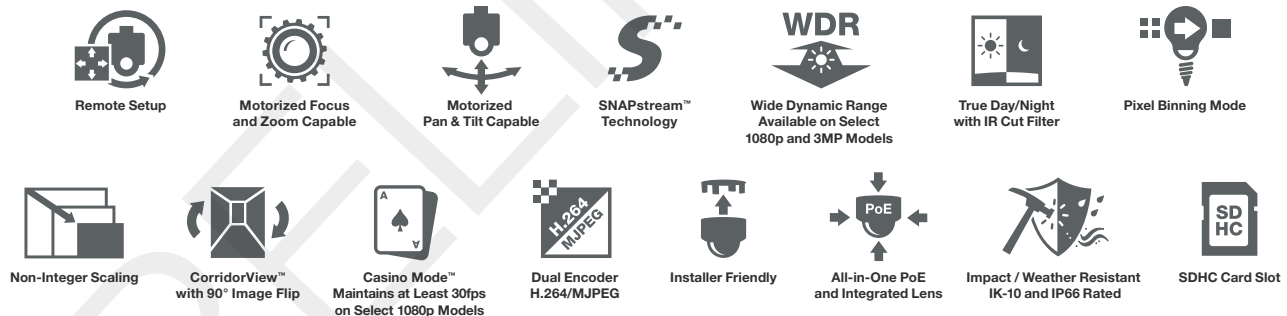


MegaDome® G3 RS third generation megapixel cameras provide ample resolution to zoom-in for details in live or recorded video. With an IR corrected motorized lens and gimbal, MegaDome G3 RS is easy to install and manage with “no-touch” remote setup. Install the magnetic mounting plate, connect the PoE (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



Camera Specifications

Model	AV2355RS	AV2356RS	AV3355RS	AV3356RS	AV5355RS	
<b>Image Sensor (CMOS)</b>	1080p	1080p*	3MP*	3MP	5MP	
<b>Day/Night</b>	True Day/Night with Automatic Removable IR Cut Filter					
<b>Optical Format</b>	1/3"	1/3.2"	1/3"	1/3.2"	1/2.5"	
<b>Pixel Pitch</b>	2.2µm	2.2µm	2.2µm	2.2µm	2.2µm	
<b>Minimum Illumination</b>	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
<b>Full FOV Resolution</b>	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	
<b>1/4 Resolution</b>	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	
<b>Scaling</b> (See Scaling Resolution Chart Below)	Yes	Yes	Yes	Yes	Yes	
<b>Dynamic Range</b>	69.5dB	WDR up to 100dB	69.5dB	WDR up to 100dB	70.1dB	
<b>Maximum SNR</b>	45dB	49dB	49dB	49dB	45dB	
<b>Frame Rates†</b>	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)
<b>Lens</b>	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

<b>Optics</b>	Remote focus, remote zoom
<b>Low Light Performance</b>	Pixel Binning Mode
<b>Programmable Shutter Speed</b>	Controls motion blur, 1ms–500ms
<b>Motion Detection</b>	Real-time, 1024 detection zones
<b>Privacy Masking</b>	Unlimited
<b>Scaling</b>	Non-integer scaling down to 128x96
<b>Casino Mode™</b>	Maintains 30fps or higher (AV2355RS models)
<b>Flexible Cropping</b>	Resolution windowing down to 1x1 pixel for JPEG and 2x2 pixels for H.264
<b>Backlight Compensation</b>	Multi-matrix white balance
<b>Flicker Control</b>	5Hz–255Hz adjustable
<b>Image Rotation</b>	CorridorView™ (90°, 180° and 270° image rotation)
<b>Wide Dynamic Range</b>	Auto adjustment between WDR and LDR modes (WDR models only)
<b>Noise Reduction</b>	Low light noise filter control
<b>Efficiency</b>	SNAPstream™ (Smart Noise Adaptation and Processing)
	Bit rate and bandwidth limitation control
	Bandwidth and storage savings by running at 1/4 resolution
<b>Sharpness</b>	Selectable enhancement level
<b>Miscellaneous</b>	Programmable resolution, brightness, saturation, gamma, tint
	Electronic pan, tilt, zoom (PTZ)

Data Transmission

<b>Compression Type</b>	H.264 (MPEG-4, Part 10) / Motion JPEG 21 levels of quality
<b>Network Protocols</b>	RTSP, RTP/TCP, RTP/UDP, HTTP, DHCP, TFTP, HTTPS, 802.1x
<b>Network Interface</b>	100Base-T Ethernet
<b>Multi-Streaming</b>	8 non-identical streams

Compliance

<b>Industry Standard</b>	ONVIF Profile S conformant
<b>Listings</b>	UL (CB)
<b>FCC Compliance</b>	47 CFR 15 Class A
<b>Environmental</b>	RoHS, REACH, WEEE
<b>Markings</b>	CE: EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3, EN60950-1
<b>Networking Standard</b>	IEEE 802.3af-2003 PoE Standard, Class 3, IPv4, 802.1x
<b>Mechanical</b>	IK-10 (EN62262), IP66 (EN60529)
<b>CoO</b>	Made in the USA

Environmental

<b>Operating temperature</b>	-40°C (-40°F) to +50°C (122°F) With motor operation: -10°C (14°F) to +50°C (122°F)
<b>Humidity</b>	0% to 90% (non-condensing)
<b>Storage temperature</b>	-40°C (-40°F) to +60°C (140°F)

Electrical

<b>Alarm Input/Output</b>	General purpose opto-coupled, 1 input / 1 output
<b>Power Over Ethernet</b>	PoE 802.3af, Class 3
<b>Auxiliary Power</b>	12-48V DC, 24V AC

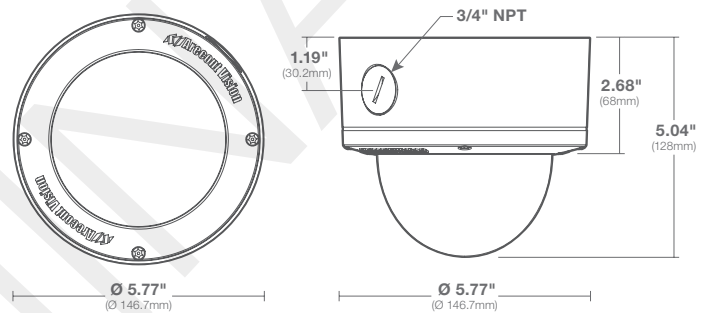
Max Power Consumption (Watts DC power)

<b>AV2355RS</b>	TBD
<b>AV2356RS</b>	TBD
<b>AV3355RS</b>	TBD
<b>AV3356RS</b>	TBD
<b>AV5355RS</b>	TBD

Mechanical

<b>Casing</b>	Die-cast aluminum chassis with 4" polycarbonate dome bubble
	IP66 weather proof standard
	Impact resistant, IK-10 rated
<b>Gimbal</b>	359° pan, 90° tilt
<b>Dimensions</b> <i>(See Dimensions)</i>	<b>Unit</b> Ø 5.77" (146.7mm) x 5" H (128mm)
	<b>Packaged</b> 6" H (150mm) x 7.5" W (190mm) x 8" L (200mm)
<b>Weight</b>	<b>Unit</b> 2.25 lbs (1.02 kg)
	<b>Packaged</b> 2.8 lbs (1.27 kg)
<b>On Board Storage</b>	SDHC slot up to 32GB (Card not included)

Dimensions



## Ordering Information



### Model Specific Features

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

### Configurations



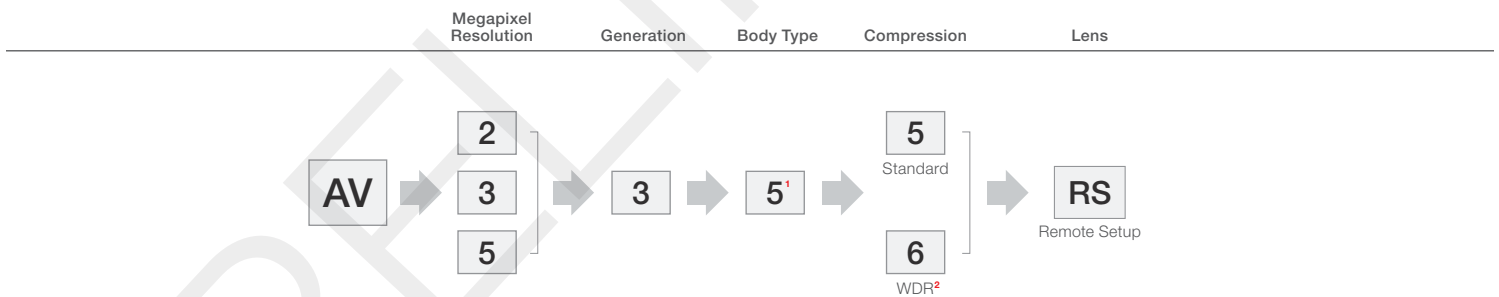
### Model Numbers

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 <i>(Fits Cap 1.5" NPT, Box Fits 3/4" NPT)</i>
AV-WMJB	Wall Mount Bracket with Junction Box <i>(Fits Cap 1.5" NPT, Box Fits 3/4" NPT)</i>
MD-2HK	Heater Kit
MD-CAP	Mounting Cap for MegaDome Series and SurroundVideo® G5 Mini
MD-JBA	Junction Box Adapter for MegaDome Series and SurroundVideo G5 Mini

### Create Your Model (Example: AV5355RS)



<sup>1</sup> "5" represents MegaDome G3 product line

<sup>2</sup> WDR for AV3356 models only

† Maximum with H.264 compression