

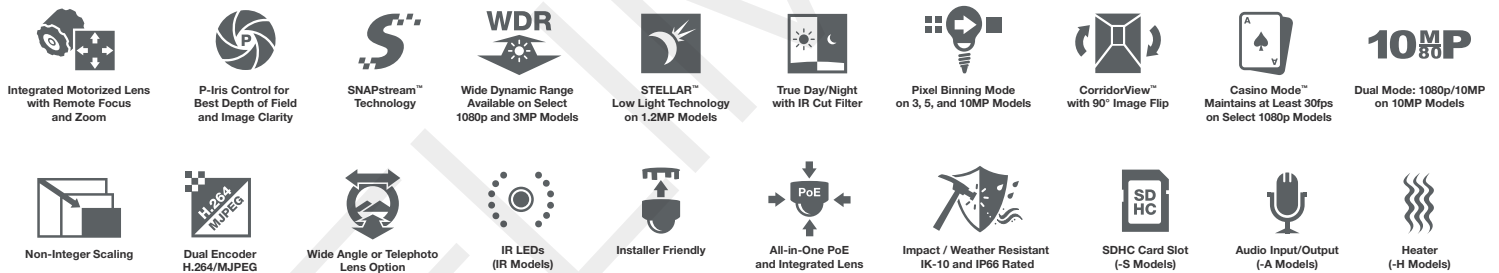
# MegaDome® G3 IP Megapixel Cameras

1.2, 1080p, 3, 5, and 10 Megapixel (MP) H.264 All-in-One Motorized P-Iris Lens True Day/Night Indoor/Outdoor Dome IP Cameras with SNAPstream™ (Smart Noise Adaptation and Processing), WDR (Wide Dynamic Range), STELLAR™ (Spatio Temporal Low Light Architecture), and IR LED Models



MegaDome® G3 third generation multi-megapixel cameras provide ample resolution to zoom-in for details in live or recorded video. These indoor/outdoor all-in-one solutions integrate a 1.2, 1080p, 3, 5 or 10-megapixel (MP) sensor with fast frame rates, and SNAPstream™ (Smart Noise Adaptation and Processing) technology to reduce bandwidth without impacting image quality. Together with an IR corrected motorized, P-iris wide angle or telephoto varifocal

lens, remote focus and remote zoom make MegaDome G3 easy to install and manage. The installer-friendly housing is IP66 environmental rated and IK-10 impact-resistant. MegaDome G3 is feature-loaded, and select models include STELLAR™ (Spatio Temporal Low Light Architecture) for best-in-class light sensitivity capturing details in near complete darkness, or wide dynamic range (WDR) for applications with bright or over saturated lighting conditions.



## Series Features

- 1.2, 1080p, 3, 5, and 10MP Models
- Remote Focus/Zoom Motorized, P-Iris Lens
- SNAPstream™ Capability to Reduce Bandwidth without Impacting Image Quality†
- P-Iris Control to Get Best Depth of Field and Image Clarity
- Wide Angle or Telephoto Lens Options
- STELLAR™ (Spatio Temporal Low Light Architecture) Reduces Motion Blur, Noise and Storage Requirements, While Enhancing Contrast and Allowing Color Imaging in Near Complete Darkness on 1.2MP Models
- 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
- True Day/Night Functionality with Mechanical IR Cut Filter and Optional IR LEDs
- Binning Mode for Strong Low Light Performance on 3MP, 5MP and 10MP Cameras
- Casino Mode™ Guarantees Continuous 30fps Frame Rate Required by Gaming Industry Regulations on Select 1080p Models
- 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
- Heater and Optional Audio and IR LEDs (No Heater Required for WDR and STELLAR Models)
- SDHC Card Slot for Onboard Storage (-S Models)
- Network Protocols Include HTTPS†, 802.1x, DHCP, and More
- Total PoE Solution (No External Power Required for Heater and IR LEDs), PoE and Auxiliary Power: 12–48V DC/24V AC
- Outdoor Rated IP66 and IK-10 Impact-Resistant Housing
- Easily Adjustable 3-Axis Gimbal

† HTTPS is for “-S” models only and cannot be used with STELLAR™ or audio functionality

Camera Specifications

Model	AV1355	AV2355	AV2356	AV3355	AV3356	AV5355	AV10355	
<b>Image Sensor (CMOS)</b>	1.2MP*	1080p	1080p**	3MP**	3MP	5MP	10MP	
<b>Day/Night</b>	True Day/Night with Automatic Removable IR Cut Filter							
<b>Optical Format</b>	1/3"	1/3"	1/3.2"	1/3"	1/3.2"	1/2.5"	1/2.3"	
<b>Pixel Pitch</b>	3.75µm	2.2µm	2.2µm	2.2µm	2.2µm	2.2µm	1.67µm	
<b>Minimum Illumination</b>	Color (Day Mode)	0.02 Lux	0.2 Lux	0.2 Lux	0.2 Lux	0.2 Lux	0.42 Lux	
	Color Binning (Day Mode)	-	-	-	0.1Lux	0.1Lux	0.21 Lux	
	B/W (Night Mode)	0.002 Lux, IR sensitive	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	0.04 Lux, IR sensitive
<b>Full FOV Resolution</b>	1280 H x 960 V	1920 H x 1080 V	1920 H x 1080 V	2048 H x 1536 V	2048 H x 1536 V	2592 H x 1944 V	3648 H x 2746 V	
<b>1/4 Resolution</b>	640 H x 480 V	960 H x 540 V	960 H x 540 V	1024 H x 768 V	1024 H x 768 V	1296 H x 972 V	1824 H x 1373 V	
<b>Scaling</b> <small>(See Scaling Resolution Chart Below)</small>	-	Yes (-S Models)	Yes (-S Models)	Yes (-S Models)	Yes (-S Models)	Yes (-S Models)	Yes (-S Models)	
<b>Dynamic Range</b>	83.5dB	69.5dB	WDR up to 100dB	69.5dB	WDR up to 100dB	70.1dB	87.2dB	
<b>Maximum SNR</b>	54dB	45dB	49dB	45dB	49dB	45dB	40dB	
<b>Frame Rates†</b>	At Max Resolution	37fps (1280 x 960)	30fps (1920 x 1080)	30fps (1920 x 1080)	21fps (2048 x 1536)	21fps (2048 x 1536)	14fps (2592 x 1944)	7fps (3648 x 2752)
	Cropped	-	30fps (1280 x 1024)	30fps (1280 x 1024)	30fps (1920 x 1080) 30fps (1280 x 1024)	30fps (1920 x 1080) 30fps (1280 x 1024)	21fps (2048 x 1536) 29fps (1920 x 1080) 41fps (1280 x 1024)	12fps (2592 x 1944) 18fps (2048 x 1536) 25fps (1920 x 1080) 37fps (1280 x 1024)
	Binning Mode	-	-	-	-	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)	29fps (1920 x 1080) 26fps (1824 x 1376) 43fps (1296 x 972) 54fps (1024 x 768)
<b>Lens</b>	Wide Angle Motorized (PM/PMIR-S Models)	3–9mm, 1/2.7", F1.2, RZ, RF, P-iris, H-FOV = 101°–32°	2.8–8mm, 1/2.7", F1.2, RZ, RF, P-iris, H-FOV = 86°–32°	2.8–8mm, 1/2.7", F1.2, RZ, RF, P-iris, H-FOV = 86°–32°	2.8–8mm, 1/2.7", F1.2, RZ, RF, P-iris, H-FOV = 104°–39°	2.8–8mm, 1/2.7", F1.2, RZ, RF, P-iris, H-FOV = 104°–39°	3–8mm, 1/2.5", F1.4, RZ, RF, P-iris, H-FOV = 113°–43°	4–8mm, 1/2.3", F1.6, RZ, RF, P-iris, H-FOV = 89°–47°
	Telephoto Motorized (PMTIR-S Models)	-	8-22mm, 1/2.7", F1.6, RZ, RF, P-Iris, Telephoto, H-FOV = 30°–12°	8-22mm, 1/2.7", F1.6, RZ, RF, P-Iris, Telephoto, H-FOV = 30°–12°	8-22mm, 1/2.7", F1.6, RZ, RF, P-Iris, Telephoto, H-FOV = 32°–12°	8-22mm, 1/2.7", F1.6, RZ, RF, P-Iris, Telephoto, H-FOV = 32°–12°	9-22mm, 1/2.5", F2.0, RZ, RF, P-Iris, Telephoto, H-FOV = 38°–16°	12-22mm, 1/2.3", F2.2, RZ, RF, P-Iris, Telephoto, H-FOV = 30°–17°

\* STELLAR™ Model \*\* 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, P-iris
<b>Low Light Performance</b>	<b>Pixel Binning Mode</b> 3, 5 and 10MP models
<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 (-S models)
<b>Casino Mode™</b>	Maintains 30fps or higher (AV2355 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, 50/60Hz (-S models)
<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>	<b>1.2-5MP Models</b>	8 non-identical streams
	<b>10MP Models</b>	4 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) w/ Heater or WDR/STELLAR™ Models w/o Heater
<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)

Model	AV1355	AV2355	AV2356	AV3355	AV3356	AV5355	AV10355
<b>PM</b>	-	-	11.3	-	11.3	-	-
<b>PM-H</b>	-	12.2	-	11.9	-	11.9	-
<b>PM-S</b>	10.9	-	-	-	-	-	-
<b>PMIR-S</b>	11.9	-	12.7	-	12.7	-	-
<b>PMIR-SA</b>	-	-	-	-	12.7	-	-
<b>PMIR-SAH</b>	-	12.1	-	-	-	12.1	-
<b>PMIR-SH</b>	-	12.1	-	12.1	-	12.1	13.0
<b>PMTIR-S</b>	-	-	14.2	-	14.2	-	-
<b>PMTIR-SH</b>	-	14.5	-	14.4	-	14.4	13.8

IR Illuminator (IR models only)

<b>PMIR</b>	12 pcs 850nm LEDs / 50ft (15m) IR distance (max) / 60° and 80° IR angle
<b>PMTIR</b>	12 pcs 850nm LEDs / 120ft (36m) IR distance (max) / 40° IR angle
<b>Power Over Ethernet</b>	Total PoE solution (No external power requirement)

Audio Electrical (-A and -AH models only)

<b>Streaming</b>	Two-way
<b>Compression</b>	G.711 PCM 8 kHz
<b>Input/Output</b>	Microphone in or line in / line output

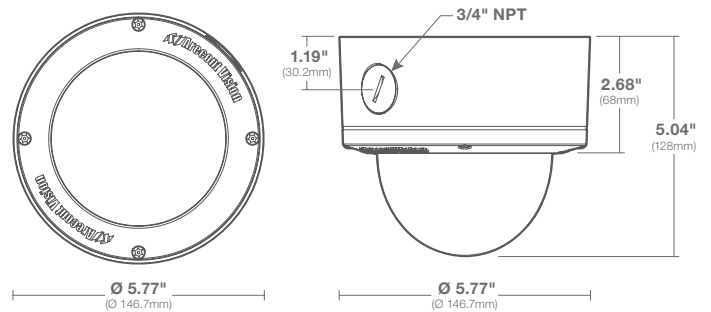
Heater Electrical (-H and -AH models only)

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

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>	Easily adjustable 3-axis camera gimbal w/360° pan, 77° tilt and 180° z-axis	
<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



\* HTTPS is for "-S" models only and cannot be used with STELLAR™ or audio functionality

# Ordering Information



## Model Numbers

<b>1.2MP</b>	AV1355PM-S	STELLAR
	AV1355PMIR-S	STELLAR
<b>1080p</b>	AV2355PM-H	
	AV2355PMIR-SAH	Audio
	AV2355PMIR-SH	
	AV2355PMTIR-SH	
	AV2356PM	WDR
	AV2356PMIR-S	WDR
<b>3MP</b>	AV3356PMTIR-S	WDR
	AV3355PM-H	
	AV3355PMIR-SH	
	AV3355PMTIR-SH	
	AV3356PM	WDR
	AV3356PMIR-S	WDR
<b>5MP</b>	AV3356PMIR-SA	Audio WDR
	AV3356PMTIR-S	WDR
	AV5355PM-H	
	AV5355PMIR-SAH	Audio
<b>10MP</b>	AV5355PMIR-SH	
	AV5355PMTIR-SH	
	AV10355PMIR-SH	Dual Mode
	AV10355PMTIR-SH	Dual Mode

## Model Specific Features

Model	Resolution	Frame Rate†	Features		
AV1355	1.2MP	37fps	-	-	STELLAR™
AV2355	1080p	30fps	-	Casino Mode™	-
AV2356	1080p	30fps	WDR	-	-
AV3355	3MP	21fps	-	-	Binning
AV3356	3MP	21fps	WDR	-	Binning
AV5355	5MP	14fps	-	-	Binning
AV10355	10MP	7fps	-	-	Binning

## Configurations



## Options

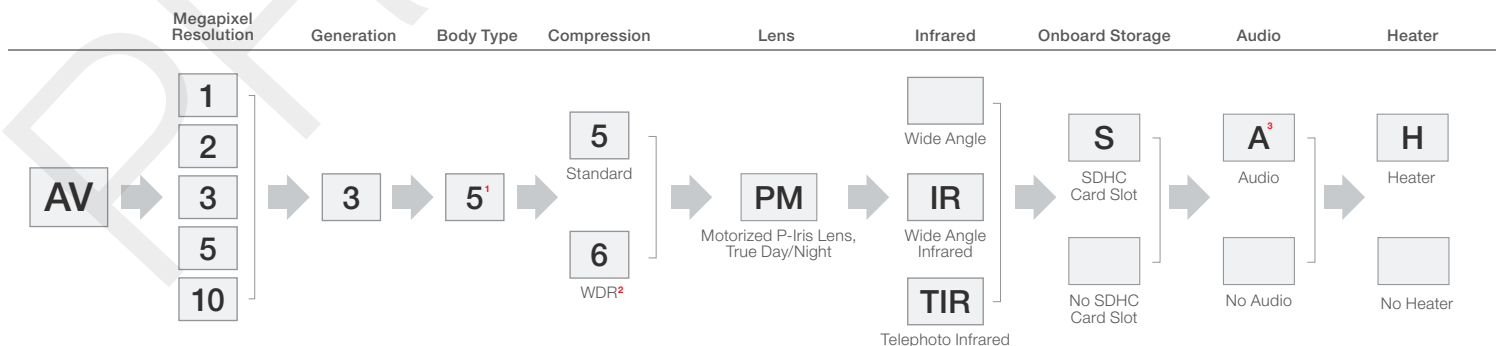
<b>PM</b>	Wide Angle Lens w/ Remote Focus/Zoom, P-Iris, True Day/Night
<b>PMT</b>	Telephoto Lens w/ Remote Focus/Zoom, P-Iris, True Day/Night
<b>IR</b>	IR LEDs
<b>-S</b>	SDHC Card Slot, Non-Integer Scaling, HTTPS‡
<b>-A</b>	Audio
<b>-H</b>	Heater (Non-WDR and Non-STELLAR™ Models Only)

Note: Not all options available on all models.

## Accessories (Sold Separately)

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

## Create Your Model (Example: AV10355PMTIR-SH)



<sup>1</sup> "5" represents MegaDome G3 product line      <sup>3</sup> Wide angle lens cameras only      ‡ HTTPS is for "-S" models only and cannot be used with STELLAR™ or audio functionality  
<sup>2</sup> WDR for AV2356 and AV3356 models only      † Maximum with H.264 compression