

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.



Integrated Motorized Lens
with Remote Focus
and Zoom



P-Iris Control for
Best Depth of Field
and Image Clarity



SNAPstream™
Technology



Wide Dynamic Range
Available on Select
1080p and 3MP Models



STELLAR™
Low Light Technology
on 1.2MP Models



True Day/Night
with IR Cut Filter



Pixel Binning Mode
on 3, 5, and 10MP Models



CorridorView™
with 90° Image Flip



Casino Mode™
Maintains at Least 30fps
on Select 1080p Models



Dual Mode: 1080p/10MP
on 10MP Models



Dual Encoder
H.264/MJPEG



Wide Angle or Telephoto
Lens Option



IR LEDs
(IR Models)



Installer Friendly



All-in-One PoE
and Integrated Lens



Impact / Weather Resistant
IK-10 and IP66 Rated



SDHC Card Slot



Audio Input/Output
(-A Models)



Heater
(-H Models)

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, and Forensic Zooming
- 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
- 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 cannot be used with STELLAR™ or audio functionality

Camera Specifications

Model		AV1355	AV2355	AV2356	AV3355	AV3356	AV5355	AV10355
Image Sensor (CMOS)		1.2MP*	1080p	1080p**	3MP**	3MP	5MP	10MP
Day/Night		True Day/Night with Automatic Removable IR Cut Filter						
Optical Format		1/3"	1/3"	1/3.2"	1/3"	1/3.2"	1/2.5"	1/2.3"
Pixel Pitch		3.75µm	2.2µm	2.2µm	2.2µm	2.2µm	2.2µm	1.67µm
Minimum Illumination	Color (Day Mode)	0.02 Lux	0.2 Lux	0.2 Lux	0.2 Lux	0.2 Lux	0.3 Lux	0.42 Lux
	Color Binning (Day Mode)	–	–	–	0.1Lux	0.1Lux	0.15Lux	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
Full FOV Resolution		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	2560 H x 1920 V	3648 H x 2746 V
1/4 Resolution		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	1280 H x 960 V	1824 H x 1373 V
Dynamic Range		83.5dB	69.5dB	WDR up to 100dB	69.5dB	WDR up to 100dB	70.1dB	57.2dB
Maximum SNR		54dB	45dB	49dB	45dB	49dB	45dB	40dB
Frame Rates†	At Max Resolution	37fps (1280 x 960)	30fps (1920 x 1080)	30fps (1920 x 1080)	21fps (2048 x 1536)	21fps (2048 x 1536)	14fps (2560 x 1920)	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	–	–	–	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) 21fps (960 x 540) 64fps (960 x 540)	29fps (1920 x 1080) 26fps (1824 x 1376) 43fps (1296 x 972) 54fps (1024 x 768)
Lens	Wide Angle Motorized (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

Programmability

Optics	Remote focus, remote zoom, P-iris
Low Light Performance	Pixel Binning Mode 3, 5 and 10MP models
Programmable Shutter Speed	Controls motion blur, 1ms–500ms
Motion Detection	Real-time, 1024 detection zones
Privacy Masking	Unlimited
Casino Mode™	Maintains 30fps or higher (AV2355 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)

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	1.2–5MP Models	8 non-identical streams
	10MP Models	4 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) w/ Heater or WDR/STELLAR™ Models w/o Heater
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

Max Power Consumption (Watts DC power)

Model	AV1355	AV2355	AV2356	AV3355	AV3356	AV5355	AV10355
PM-S	10.9	-	-	-	-	-	-
PMIR-S	11.9	-	12.7	-	12.7	-	-
PMIR-SA	-	-	-	-	12.7	-	-
PMIR-SAH	-	12.1	-	-	-	12.1	-
PMIR-SH	-	12.1	-	12.1	-	12.1	13.0
PMTIR-S	-	-	14.2	-	14.2	-	-
PMTIR-SH	-	14.5	-	14.4	-	14.4	13.8

IR Illuminator (IR models only)

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

Audio Electrical (-A and -AH models only)

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

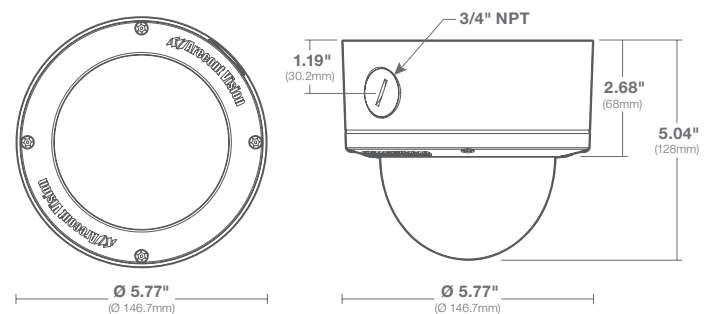
Heater Electrical (-H and -AH models only)

Power Consumption	2.28 W 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)

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 and 180° z-axis	
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		
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

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

Note: Not all options available on all models.

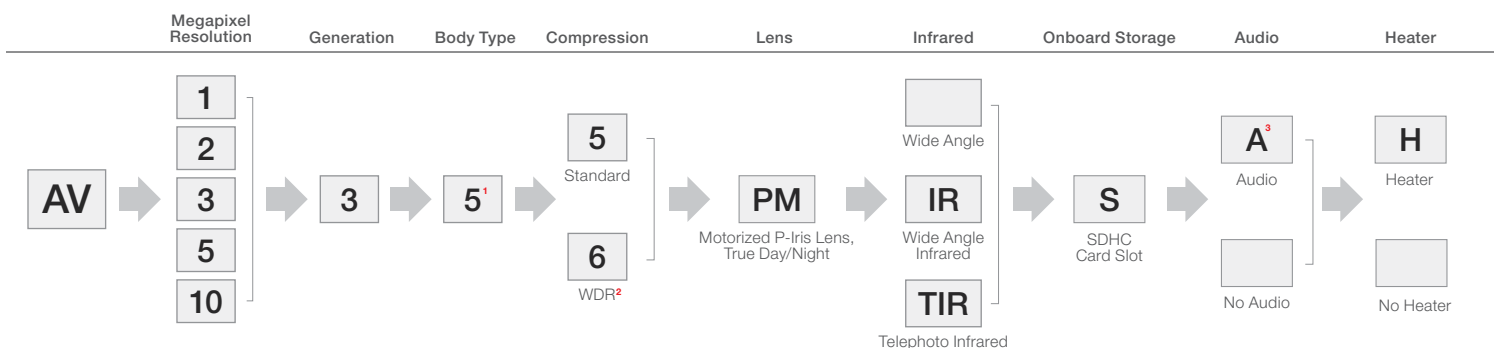
Model Numbers

1.2MP	AV1355PM-S	STELLAR
	AV1355PMIR-S	STELLAR
1080p	AV2355PMIR-SAH	Audio
	AV2355PMIR-SH	
	AV2355PMTIR-SH	
	AV2356PMIR-S	WDR
	AV2356PMTIR-S	WDR
3MP	AV3355PMIR-SH	
	AV3355PMTIR-SH	
	AV3356PMIR-S	WDR
	AV3356PMIR-SA	Audio WDR
	AV3356PMTIR-S	WDR
5MP	AV5355PMIR-SAH	Audio
	AV5355PMIR-SH	
	AV5355PMTIR-SH	
10MP	AV10355PMIR-SH	Dual Mode
	AV10355PMTIR-SH	Dual Mode

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: AV10355PMTIR-SH)



¹ "5" represents MegaDome G3 product line

² WDR for AV2356 and AV3356 models only

³ Wide angle lens cameras only

[†] Maximum with H.264 compression

[‡] HTTPS cannot be used with STELLAR™ or audio functionality