

MegaVideo® G5 IP Megapixel Cameras

1.2, 1080p, 3, 5, and 10 Megapixel (MP) H.264 True Day/Night Indoor Box-Style Compact IP Cameras with SNAPstream™ (Smart Noise Adaptation and Processing), Enhanced WDR™ (Wide Dynamic Range), and STELLAR™ (Spatio Temporal Low Light Architecture) Models



The MegaVideo® G5 multi-megapixel, indoor compact camera series delivers 1.2-, 1080p, 3-, 5-, or 10-megapixel resolutions (lens sold separately). Regardless of time-of-day, this camera is ideal for applications with challenging lighting conditions. The series combines a day/night mechanical IR cut filter with an optional P-iris lens on "PM" models for precise, optimal image quality. For applications with poor lighting conditions due to strong backlighting, reflections from wet flooring/puddles, or contrast due to fog, mist, or glare, optional Enhanced WDR™ wide dynamic range is available on select 1080p and 3MP models.

Select 1080p models provide 30 images-per-second for optimum performance in fast action scenes such as casino and banking applications. For challenging low-light applications, the 1.2MP STELLAR™ model offers best-in-class light

sensitivity capturing details in extreme low-light (0.002 lux in monochrome) at an incredibly high frame rate of 37 frames per second. The SD card slot on "-S" models supports up to 32GB of storage capacity for convenient onboard storage. MegaVideo G5 features SNAPstream™ (Smart Noise Adaptation and Processing) technology to reduce bandwidth without impacting image quality.

The camera's power can be supplied via a Power-over-Ethernet compliant network cable connection or with power from a 12–48V DC/24V AC power supply. The camera's interface allows for an intuitive, fast, and easy configuration. The MegaVideo G5 is ONVIF Profile S (Open Network Video Interface Forum) compliant, providing interoperability between network video products regardless of manufacturer.



Series Features

- 1.2, 1080p, 3, 5, or 10MP Models
- P-Iris Control for Best Depth of Field and Image Clarity
- SNAPstream™ Capability to Reduce Bandwidth without Impacting Image Quality
- Enhanced WDR™ up to 100dB at Full Resolution Available on Select 1080p and 3MP Models
- 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
- True Day/Night Functionality with Mechanical IR Cut Filter
- Binning Mode for Strong Low Light Performance on 3MP, 5MP, and 10MP Models
- CorridorView™ Allows 90° Image Rotation for Better Coverage in Hallways and Corridors
- Casino Mode™ Guarantees Continuous 30fps Frame Rate Required by Gaming Industry Regulations on Select 1080p Models
- Dual Mode Allows 10MP Models to Switch Between 10MP and 1080p
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control, Multi-Streaming, Multicasting, and Forensic Zooming
- Non-Integer Scaling for 1080p and Higher Megapixel Resolution Models (-S models)
- Dual Encoder H.264/MJPEG
- Network Protocols Include HTTPS*, 802.1x, DHCP, QoS, IPv6, and More
- PoE and Auxiliary Power: 12–48V DC/24V AC
- SDHC Card Slot for Onboard Storage (-S models)
- Many Lenses to Choose From Including Remote Focus/Zoom Motorized P-Iris Lenses (Sold Separately)*
- Small Size for Flexible Mounting Options
- Use with Arecont Vision Housings, or as a Standalone Camera

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

** P-Iris motorized lenses are only compatible with PM models

Camera Imaging Specifications

Model	AV1215		AV2215		AV2216		AV3215		AV3216		AV5215		AV10215		
	PM-S	PM-S	DN	PM-S	DN	PM-S	DN	PM-S	DN	PM-S	DN	PM-S	DN		
Image Sensor	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)	-		-		-		0.1 Lux		0.1 Lux		0.15 Lux		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 2752 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 1376 V		
Scaling	-		Yes		-		Yes		-		Yes		-		
Dynamic Range	83.5dB		69.5dB		WDR up to 100dB		69.5dB		WDR up to 100dB		70.1dB		57.2dB		
Maximum SNR	54dB		44dB		49dB		44dB		49dB		45dB		40dB		
Frame Rates†	At Max Resolution	37fps (1280x1024)		30fps (1920x1080)		30fps (1920x1080)		21fps (2048x1536)		21fps (2048x1536)		14fps (2560x1920)		7fps (3648x2752)	
	Cropped	-		42fps (1280x1024)		30fps (1280x1024)		29fps (1920x1080) 41fps (1280x1024)		30fps (1920x1080) 30fps (1280x1024)		21fps (2048x1536) 29fps (1920x1080) 41fps (1280x1024)		12fps (2592x1944) 18fps (2048x1536) 25fps (1920x1080) 37fps (1280x1024)	
	Binning Mode	-		-		-		46fps (1024x768) 64fps (960x540)		21fps (1024x768) 21fps (800x600) 21fps (960x540) 21fps (640x512)		34fps (1296x972) 46fps (1024x768) 64fps (960x540)		29fps (1920x1080) 26fps (1824x1376) 43fps (1296x972) 54fps (1024x768)	
Lens (Sold separately)	See MPL Megapixel Lenses and Ultra HD Megapixel Lenses specification sheets for lens options														

*** STELLAR™ Model **** Effective † Maximum with H.264 compression

Programmability

Optics	Remote focus, remote zoom, and P-iris control (when remote focus/zoom lens is used) (PM models only)
Low Light Performance	STELLAR 1.2MP models
	Pixel Binning Mode 3, 5, and 10MP models
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
Casino Mode™	Maintains 30fps or higher (AV2215 models)
MoonLight™ Mode	Extended exposure and noise cancellation
Flexible Cropping	Resolution windowing down to 1x1 pixel for JPEG and 2x2 pixels for H.264
Backlight Compensation	Auto multi-matrix white balance
Flicker Control	5Hz–255Hz adjustable
Image Rotation	180° image flip or CorridorView™ (90°, 180°, and 270° image rotation)
Scaling	Non-integer scaling down to 128x96 (1080p, 3MP, 5MP, and 10MP "-S" models only) (See Scaling Resolution Chart on page 3)
Wide Dynamic Range	Auto switch control adjustment between WDR and LDR modes (WDR models)
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
SDHC Card Slot	Supports micro SDHC cards up to 32GB (-S models only)
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	IPv4, IPv6, HTTP, HTTPS*, QoS, 802.1x, RTSP, RTP/TCR, RTP/UDP, TFTP, DHCP	
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
CoO	Made in the USA

Environmental

Operating Temperature	-5°C (23°F) to +50°C (122°F)
	-5°C (23°F) to +40°C (104°F) in D4SO-3 housings
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 2
Auxiliary Power	12–48V DC, 24V AC

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Max Power Consumption (Watts DC power - includes lens)

Model	PM-S	DN
AV1215	6.2W	-
AV2215	6.9W	5.0W
AV2216	7.8W	6.0W
AV3215	6.9W	5.0W
AV3216	7.8W	6.0W
AV5215	7.1W	5.3W
AV10215	6.6W [‡]	5.4W

‡ Without motorized lens

Scaling Resolution Chart[§]

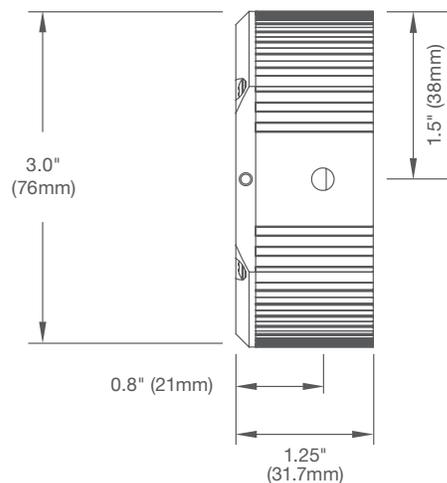
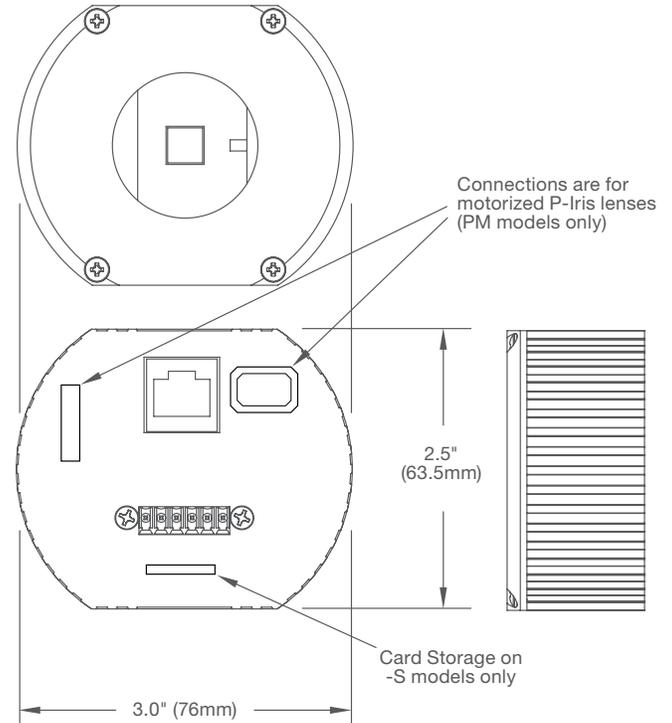
Scaled Resolution	H	V	Pixel Count
720p	1280	720	921600
XVGA	1024	768	786432
DVGA (16:9)	1136	640	727040
DVGA (3:2)	960	640	614400
SVGA	800	600	480000
D1 (PAL)	720	576	414720
4CIF (PAL)	704	576	405504
D1 (NTSC)	720	480	345600
4CIF (NTSC)	704	480	337920
VGA	640	480	307200
2CIF (PAL)	704	288	202752
HVGA (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

Mechanical

Casing	Die-cast aluminum chassis	
	C/CS lens mount	
Dimensions <i>(See Dimensions)</i>	Unit	3" W (76mm) x 1.25" D (31.7mm) x 2.5" H (63.5mm) (w/o lens)
	Packaged	4" W (102mm) x 4" L (102mm) x 3.7" H (94mm)
Weight	Unit	0.6lbs (0.272kg) w/o lens
	Packaged	0.7lbs (0.318kg)

Dimensions



See Next Page for Ordering Information



Configuration



Lens Options (Sold Separately)

Motorized P-Iris	MPL2.8-8.5MPI ^{1,2} (2.8-8.5mm)	1.2MP	1080p	3MP
	MPL3.3-8.5MPI ² (3.3-8.5mm)			5MP
	MPL9-36MPI (9-36mm)	1.2MP	1080p	3MP 5MP
	UHD4.0-10MPI (4-10mm)			5MP 10MP
	UHD12-50MPI (12-50mm)			5MP 10MP
	UHD30-120MPI ³ (30-120mm)			5MP 10MP
Manual Vari-Focal	MPL4-10 (4.5-10mm)	1.2MP	1080p	3MP 5MP
	MPL4-12 (4-12mm)	1.2MP	1080p	3MP 5MP
	MPL8-16 (8-16mm)	1.2MP	1080p	3MP 5MP
	MPL12-40 (12-40mm)	1.2MP	1080p	3MP 5MP
	MPL33-12A ^{1,2} (3.3-12mm)	1.2MP	1080p	3MP 5MP
	UHD45-10 (4.5-10mm)			5MP 10MP
Manual Fixed Focal	MPL1.55 ² (1.55mm)	1.2MP	1080p	3MP 5MP
	MPL3.5 ^{1,2} (3.5mm)	1.2MP	1080p	3MP 5MP
	MPL4.0 ² (4mm)	1.2MP	1080p	3MP 5MP
	MPL8.0 ² (7.8mm)	1.2MP	1080p	3MP 5MP
	JHF25M (25mm)			5MP 10MP
	JHF35M (35mm)			5MP 10MP

Compatible Housings (Sold Separately)

D4SO-3	4" Outdoor Dome Housing for MegaVideo® G5
HSG3³	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 Bracket for HSG2 and HSG3 Housing

(See Standard Dome Accessories specifications sheet for D4SO-3 housing compatible accessories)

Model Specific Features

Model	Resolution	Frame Rate [†]	Features		
AV1215	1.2MP	37fps	-	-	STELLAR™
AV2215	1080p	30fps	-	Casino Mode™	-
AV2216	1080p	30fps	WDR	-	-
AV3215	3MP	21fps	-	-	Binning
AV3216	3MP	21fps	WDR	-	Binning
AV5215	5MP	14fps	-	-	Binning
AV10215	10MP	7fps	-	-	Binning

[†] Maximum with H.264 compression

Model Numbers

1.2MP	AV1215PM-S	STELLAR	
1080p	AV2215PM-S		AV2215DN
	AV2216PM-S	WDR	AV2216DN WDR
3MP	AV3215PM-S		AV3215DN
	AV3216PM-S	WDR	AV3216DN WDR
5MP	AV5215PM-S		AV5215DN
10MP	AV10215PM-S	Dual Mode	AV10215DN Dual Mode

Options

DN	True Day/Night
PM	Remote Focus/Zoom Lens Capable, P-iris, True Day/Night
-S	SDHC Card Slot, Non-Integer Scaling, HTTPS*

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Create Your Model (Example: AV3216PM-S)

