

MegaVideo® G5 IP Megapixel Cameras

1.2–10MP H.264 True Day/Night Indoor Box-Style Compact IP Cameras with 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 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 wide dynamic range is available on some 1080p and 3MP models. 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 supports up to 32GB of storage capacity for convenient onboard storage. Motorized remote focus/zoom lenses makes set-up and maintenance easy. 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) and PSIA (Physical Security Interoperability Alliance) compliant, providing interoperability between network video products regardless of manufacturer.



True Day/Night
with IR Cut Filter



CorridorView™
with 90° Image Flip



SDHC Card Slot



Motorized Remote
Focus/Zoom and Manual Lens
Options and Housing Options



P-Iris Control for
BestDepth of Field
and Image Clarity



STELLAR™
Low Light Technology
on 1.2MP Models



WDR
Wide Dynamic Range
Available on Some
1080p and 3MP Models

10MP
80P

Dual Mode:
1080p/10MP



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



Casino Mode™
Maintains at Least 30fps
on AV2215 Models

Series Features

- 1.2–10MP Models
- True Day/Night Functionality with Mechanical IR Cut Filter
- CorridorView™ Allows 90° Image Rotation for Better Coverage in Hallways and Corridors
- Dual Encoder H.264/MJPEG
- SDHC Card Slot for Onboard Storage
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control, Multi-Streaming, Forensic Zooming
- Many Lenses to Choose From Including Remote Focus/Zoom Motorized P-Iris Lenses (Sold Separately)
- P-Iris Control for Best Depth of Field and Image Clarity
- PoE and Auxiliary Power: 12–48V DC/24V AC
- Small Size for Flexible Mounting Options
- Use with Arecont Vision Housings, or as a Standalone Camera

Model Dependent Features

- 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 WDR up to 100dB at Full Resolution: See Clearly in Shaded and Bright Light Conditions Simultaneously on Some 1080p and 3MP Models
- Dual Mode Allows 10MP Models to Switch Between 10MP and 1080p
- Binning Mode for Strong Low Light Performance on 3MP, 5MP, and 10MP Models
- Non-Integer Scaling for 1080p and Higher Megapixel Resolution Models
- Casino Mode™ Guarantees Continuous 30fps Frame Rate Required by Gaming Industry Regulations (AV2215 Models)

Camera Specifications

Model	AV1215	AV2215	AV2216	AV3215	AV3216	AV5215	AV10215	
Image Sensor	1.2MP*	1080p	1080p	3MP	3MP	5MP	10MP	
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	0.1 Lux	0.3 Lux	0.1 Lux	0.3 Lux	0.3 Lux	0.42 Lux
	Color Binning (Day Mode)	-	-	-	0.05 Lux	0.15 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	0.02 Lux, IR sensitive	0.03 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	2592 H x 1944 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	1296 H x 972 V	1824 H x 1376 V	
Scaling	-	Yes	Yes	Yes	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 (1280x960)	30fps (1920x1080)	30fps (1920x1080)	21fps (2048x1536)	21fps (2048x1536)	14fps (2592x1944)	7fps (3648x2752)
	Cropped	-	42fps (1280x1024)	41fps (1280x1024)	30fps (1920x1080) 41fps (1280x1024)	30fps (1920x1080) 41fps (1280x1024)	21fps (2048x1536) 29fps (1920x1080) 41fps (1280x1024)	12fps (2592x1944) 18fps (2048x1536) 25fps (1920x1080) 37fps (1280x1024)
	Binning Mode	-	-	-	46fps (1024x768) 64fps (960x540)	21fps (1024x768) 27fps (800x600) 31fps (960x540) 32fps (640x512)	34fps (1296x972) 46fps (1024x768) 64fps (960x540)	29fps (1920x1080) 26fps (1824x1376) 43fps (1296x972) 54fps (1024x768)
Lens <i>(Sold separately)</i>	MPL2.8-8.5MPI RF/RZ/P-iris/ CS mount	2.8-8.5mm, F1.2 102°-34° HFOV	2.8-8.5mm, F1.2 86°-30° HFOV	2.8-8.5mm, F1.2 86°-30° HFOV	2.8-8.5mm, F1.2 94°-32° HFOV	2.8-8.5mm, F1.2 94°-32° HFOV	-	-
	MPL3.3-8.5MPI RF/RZ/P-iris/ CS mount	-	-	-	-	-	3.3-8.5mm, F1.3 95°-41° HFOV	-
Max Power Consumption <i>(Includes lens)</i>	6.2W	6.9W	7.8W	6.9W	7.8W	7.1W	6.6W**	

* STELLAR™ Model ** Without Motorized Lens

Programmability

Optics	Remote focus, remote zoom and P-iris control (PM models when Remote Focus/Zoom Lens is used) Pixel Binning Mode (3MP, 5MP, 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 model)
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	50/60Hz selectable
Image Rotation	180° image flip or CorridorView™ (90°, 180° and 270° image rotation) on -S models
Scaling	Non-integer scaling down to 128x96 (1080p, 3MP, 5MP, and 10MP models) <i>(See Scaling Resolution Chart on page 3)</i>
Wide Dynamic Range	Auto switch control adjustment between WDR and LDR modes (WDR models)
Noise Reduction	Low light noise filter control
Efficiency	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
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, QoS, IPv4, IPv6
Network Interface	100Base-T Ethernet
Multi-Streaming	8 non-identical streams

Compliance

Industry Standard	ONVIF Profile S and PSIA 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-CoO1
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 Dome4 and D4SO 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

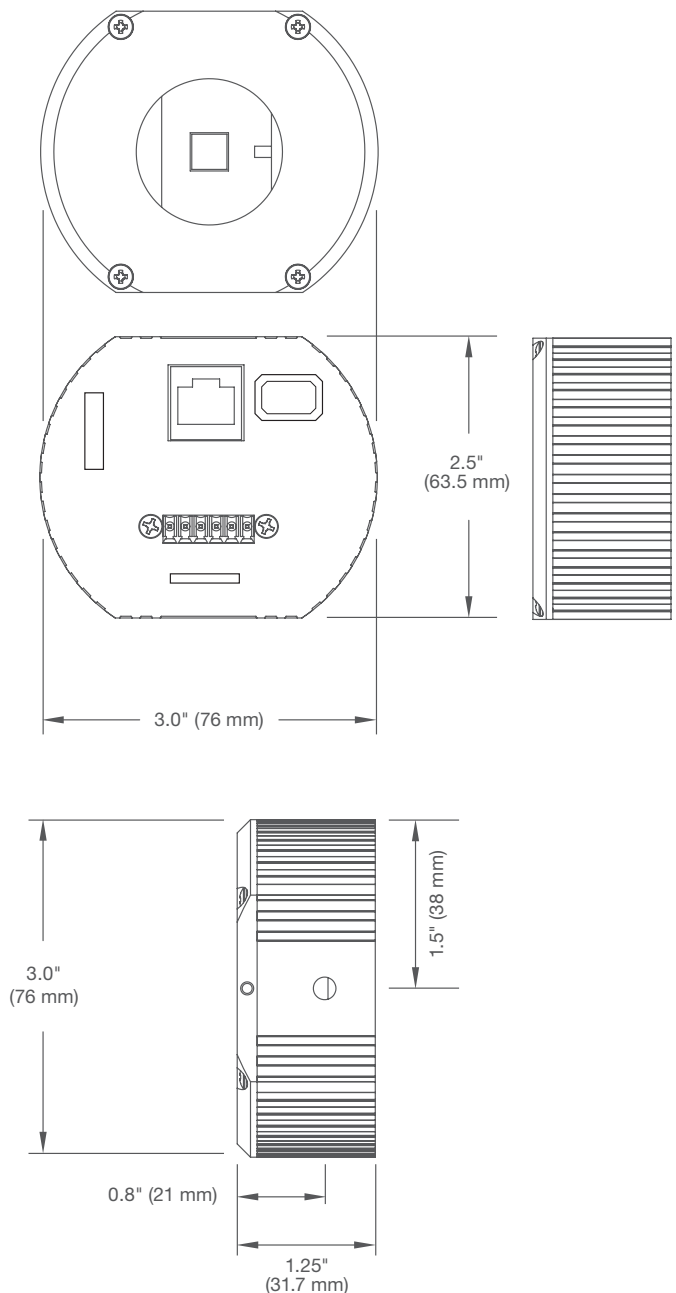
Scaling Resolution Chart

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

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

Ordering Information



Configuration



PM-S

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

Model Numbers

1.2MP	AV1215PM-S	STELLAR
1080p	AV2215PM-S	
	AV2216PM-S	WDR
3MP	AV3215PM-S	
	AV3216PM-S	WDR
5MP	AV5215PM-S	
10MP	AV10215PM-S	Dual Mode

Lens Options (Sold Separately)

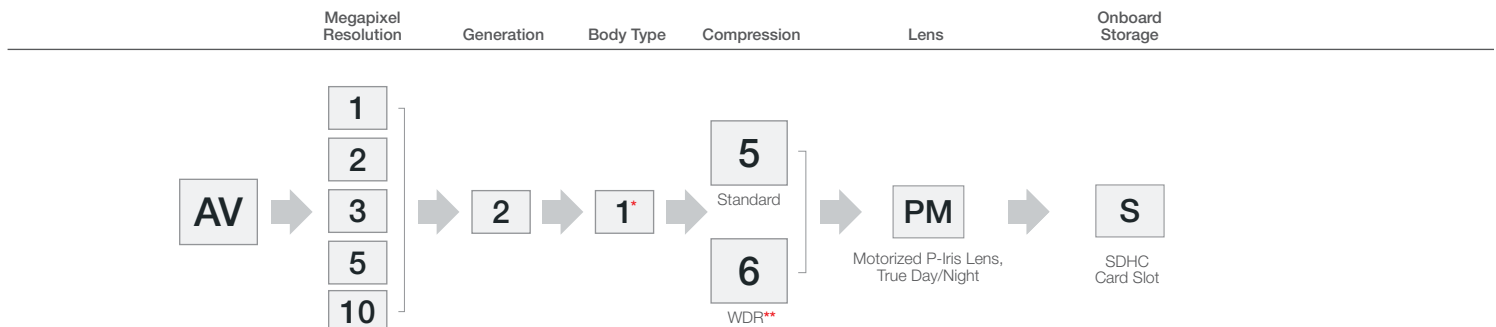
Motorized P-Iris	MPL2.8-8.5MPI ¹ (2.8–8.5mm)	1.2MP	1080p	3MP		
	MPL3.3-8.5MPI (3.3–8.5mm)			5MP		
Manual Vari-Focal	MPL4-10 (4.5–10mm)	1.2MP	1080p	3MP	5MP	
	MPL4-12 (4–12mm)	1.2MP	1080p	3MP	5MP	
	MPL8-16 (8–16mm)	1.2MP	1080p	3MP	5MP	
	MPL12-40 (12–40mm)	1.2MP	1080p	3MP	5MP	
	MPL33-12A ¹ (3.3–10.5mm)	1.2MP	1080p	3MP	5MP	
	UHD45-10 (4.5–10mm)				5MP	10MP
Manual Fixed Focal	MPL1.55 (1.55mm)	1.2MP	1080p	3MP	5MP	
	MPL3.5 ¹ (3.5mm)	1.2MP	1080p	3MP	5MP	
	MPL4.0 (4mm)	1.2MP	1080p	3MP	5MP	
	MPL6.0 (6mm)	1.2MP	1080p	3MP	5MP	
	MPL6.2 ¹ (6.2mm)	1.2MP	1080p	3MP	5MP	
	MPL8.0 (7.8mm)	1.2MP	1080p	3MP	5MP	
	UHD7.2 (7.2mm)				5MP	10MP
	JHF25M-5MP (25mm)				5MP	10MP
	JHF35M-5MP (35mm)				5MP	10MP

¹ Recommended for WDR models

Compatible Housings (Sold Separately)

HSG2	Outdoor PoE Bullet-Style Housing
D4SO	Outdoor 4" Dome Housing
Dome4-O	Outdoor 4" Dome Housing
Dome4-I	Indoor 4" Dome Housing

Create Your Model (Example: AV5215PM-S)



* "1" represents MegaVideo® product line
 ** WDR for AV2216 and AV3216 models only