

MegaDome® 2

H.264 All-in-One Motorized P-Iris Lens Day/Night IR Indoor/Outdoor Dome IP Cameras with Wide Dynamic Range (WDR) and STELLAR™ Low Light Models

Camera Models

1.2 Megapixel	1.3 Megapixel	1080p	1080p WDR	3 Megapixel	3 Megapixel WDR	5 Megapixel	10 Megapixel
AV1255PM-SH	AV1255DN-H	AV2255DN-H	AV2256DN	AV3255DN-H	AV3256DN	AV5255DN-H	AV10255PMIR-SH
AV1255PMIR-SH		AV2255AM-H	AV2256PM	AV3255AM-H	AV3256PM	AV5255AM-H	AV10255PMTIR-SH
		AV2255PMIR-SH	AV2256PMIR-S	AV3255PMIR-SH	AV3256PMIR-S	AV5255PMIR-SH	
		AV2255PMIR-SAH	AV2256PMTIR-S	AV3255PMTIR-SH	AV3256PMIR-SA	AV5255PMIR-SAH	
		AV2255PMTIR-SH			AV3256PMTIR-S	AV5255PMTIR-SH	

MegaDome® 2 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, 1.3, 1080p, 3, 5 or 10-megapixel (MP) sensor with fast frame rates together with an IR corrected motorized wide angle or telephoto vari-focal lens. It is IP66 environmental rated and IK-10 impact-resistant. Remote focus and remote zoom make MegaDome® 2 easy to install and manage. MegaDome® 2 cameras are also available in manual lens models.



Integrated Motorized Lens with Remote Focus and Zoom (AM/PM Version)

P-Iris Control for Best Depth of Field and Image Clarity (PM Models)

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

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

STELLAR™ Low Light Technology on 1.2MP Models

Wide Angle or Telephoto Lens Option

IR LEDs (IR Models)

Impact / Weather Resistant IK-10 and IP66 Rated

True Day/Night with IR Cut Filter

All-in-One Dome Solution

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

CorridorView™ with 90° Image Flip (-S Models)

SDHC Card Slot (-S Models)

Dual Encoder H.264/MJPEG

Casino Mode™ Maintains at Least 30fps on AV2255 Models

Audio Input/Output (-A Models)

Heater (-H Models)

Features:

- 1.2–10MP Models
- Remote Focus/Zoom Motorized Auto-Iris or P-Iris Lens (AM/PM Models)
- P-Iris Control to Get Best Depth of Field and Image Clarity (PM Models)
- Wide Angle or Telephoto Lens Options
- STELLAR™ Low Light Technology 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 Some 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 (AV2255 Models)
- CorridorView™ Allows 90° Image Rotation for Better Coverage in Hallways and Corridors
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control, Multi-Streaming, Forensic Zooming and Non-Integer Scaling
- Dual Encoder H.264/MJPEG
- Heater and Optional Audio and IR LEDs (No Heater Required for WDR Models)
- SDHC Card Slot for Onboard Storage (-S Models)
- Total PoE Solution (No External Power Required for Heater and IR LEDs) with Auxiliary Power: 12–48V DC/24V AC
- Outdoor Rated IP66 and IK-10 Impact-Resistant Housing
- Easily Adjustable 3-Axis Gimbal
- Made in the USA

Model Specific Features

Model	Resolution	Frame Rate	Features		
AV1255	1.2MP	37fps	–	–	STELLAR™
	1.3MP	42fps	–	–	–
AV2255	1080p	30fps	–	Casino Mode™	–
AV2256	1080p	30fps	WDR	–	–
AV3255	3MP	21fps	–	–	Binning
AV3256	3MP	21fps	WDR	–	Binning
AV5255	5MP	14fps	–	–	Binning
AV10255	10MP	7fps	–	–	Binning

Other Features and Options

Option	Description
AM	Remote Focus/Zoom, Auto-Iris, Day/Night
PM	Wide Angle Lens w/ Remote Focus/Zoom, P-Iris, Day/Night
PMT	Telephoto Lens w/ Remote Focus/Zoom, P-Iris, Day/Night
DN	Manual Lens, Day/Night
IR	IR LEDs
-H	Heater (Non-WDR Models Only)
-A	Audio
-S	SDHC Card Slot, CorridorView™ w/ 90° Image Flip, Non-Integer Scaling



Camera Imaging Specifications

		WDR				WDR			
Model		AV1255	AV2255	AV2256	AV3255	AV3256	AV5255	AV10255	
Image Sensor (CMOS)		1.2MP*	1.3MP**	1080p	1080p**	3MP**	3MP	5MP	10MP
Optical Format		1/3"	1/2.7"	1/2.7"	1/3.2"	1/2.5"	1/3.2"	1/2.5"	1/2.3"
Pixel Pitch		3.75µm	3µm	3µm	2.2µm	2.2µm	2.2µm	2.2µm	1.67µm
Minimum Illumination	Color (Day Mode)	0.02 Lux	0.1 Lux	0.1 Lux	0.3 Lux	0.3 Lux	0.3 Lux	0.3 Lux	0.42 Lux
	Color Binning (Day Mode)	-	-	-	-	0.15 Lux	0.15 Lux	0.15 Lux	0.21 Lux
	B/W (Night Mode)	0.002 Lux, 0 Lux, IR sensitive	0 Lux, IR sensitive	0 Lux, IR sensitive	0 Lux, IR sensitive	0 Lux, IR sensitive	0 Lux, IR sensitive	0 Lux, IR sensitive	0 Lux, IR sensitive
Full FOV Resolution		1280 H x 960 V	1280 H x 1024 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	640 H x 512 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		-	-	See: Scaling Resolution Chart	See: Scaling Resolution Chart	See: Scaling Resolution Chart	See: Scaling Resolution Chart	See: Scaling Resolution Chart	See: Scaling Resolution Chart
Dynamic Range		83.5dB	69dB	69dB	WDR up to 100dB	70.1dB	WDR up to 100dB	70.1dB	57.2dB
Maximum SNR		54dB	45dB	45dB	49dB	45dB	49dB	45dB	40dB
Frame Rates	At Max Resolution	37fps (1280x960)	42fps (1280x1024)	30fps (1920x1080)	30fps (1920x1080)	21fps (2048x1536)	21fps (2048x1536)	14fps (2592x1944)	7fps (3648x2752)
	Cropped	-	-	42fps (1280x1024)	41fps (1280x1024)	29fps (1920x1080) 41fps (1280x1024)	30fps (1920x1080) 31fps (1600x1200) 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	Wide Angle Motorized (AM Models)	-	-	3-9mm, F1.2, RZ, RF, Auto-iris, H-FOV = 115°-37°	-	3.6-9mm, F1.8, RZ, RF, Auto-iris, H-FOV = 76°-28°	-	3.6-9mm, F1.8, RZ, RF, Auto-iris, H-FOV = 96°-36°	-
	Wide Angle Motorized (PM/PMIR Models)	3-9mm, F1.2, RZ, RF, P-iris H-FOV = 92°-31°	-	2.8-8mm, F1.2, RZ, RF, P-iris, H-FOV = 120°-44°	3-9mm, F1.2, RZ, RF, P-iris, H-FOV = 82°-27°	2.8-8mm, F1.2, RZ, RF, P-iris, H-FOV = 94°-34°	3-9mm, F1.2, RZ, RF, P-iris, H-FOV = 87°-29°	3-8mm, F1.4, RZ, RF, P-iris, H-FOV = 113°-43°	4-8mm, F1.6, RZ, RF, P-iris, H-FOV = 89°-47°
	Telephoto Motorized (PMTIR Models)	-	-	8-22mm, 1/2.7", F1.6, RZ, RF, P-iris, Telephoto, H-FOV = 42°-16°	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 = 29°-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°
	Manual Lens (DN Models)	-	3.4-10.5mm, 1/2.5", F1.6, H-FOV = 62°-24°	3.4-10.5mm, 1/2.5", F1.6, H-FOV = 93°-36°	3.4-10.5mm, 1/2.5", F1.6, H-FOV = 68°-26°	3.4-10.5mm, 1/2.5", F1.6, H-FOV = 73°-28°	3.4-10.5mm, 1/2.5", F1.6, H-FOV = 72°-28°	3.4-10.5mm, 1/2.5", F1.6, H-FOV = 92°-36°	-

* STELLAR™ Model ** Effective

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

Data Transmission

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

Programmability

Remote focus, remote zoom and auto-iris or P-iris (AM or PM models)
Motion detection and privacy mask with up to 1024 detection zones
Non-integer scaling down to 128x96
Auto adjustment between WDR and LDR modes (WDR models Only)
Programmable shutter speed to help control motion blur
Pixel Binning Mode (3, 5 and 10MP)
Casino Mode™ maintains 30fps (AV2255 model)
Flexible Cropping (resolution windowing down to 1x1 pixel for JPEG and 2x2 pixels for H.264)
Low light noise filter control
Bit rate and bandwidth limitation control
Backlight compensation and multi-matrix white balance
50/60Hz selectable flicker control
Electronic pan, tilt, zoom (PTZ)
180° image flip or CorridorView™ (90°, 180° and 270° image rotation) on -S models
Programmable resolution, brightness, saturation, gamma, sharpness, tint

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, EN60950-1
	Mechanical	IK-10 (EN62262), IP66 (EN60529)

Environmental	Operating temperature	-40°C (-40°F) to +50°C (122°F) w/ Heater or WDR Models w/o Heater
	Humidity	0% to 90% (non-condensing)
	Stable image temperature	0°C (32°F) to +50°C (122°F)
	Storage temperature	-40°C (-40°F) to +60°C (140°F)

Electrical	Alarm Input/Output	General purpose opto-coupled
	Power Over Ethernet	PoE 802.3af, Class 2
	Auxiliary Power	12-48V DC, 24V AC

Max Power Consumption (Watts DC Power)

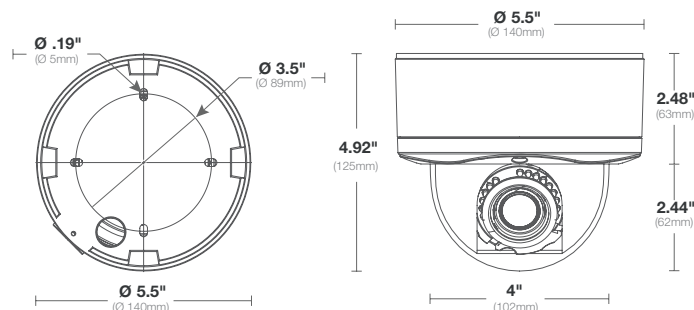
	DN	DN-H	AM-H	PM	PM-SH	PMIR-S	PMIR-SH	PMTIR-S	PMTIR-SH
AV1255	1.2MP	-	-	-	-	9.0	-	11.7	-
	1.3MP	-	10.2	-	-	-	-	-	-
AV2255	-	10.2	10.2	-	-	-	12.1	-	14.5
AV2256/3256	6.6	-	-	11.3	-	12.7	-	14.2	-
AV3255/5255	-	9.9	9.9	-	-	-	12.1	-	14.4
AV10255	-	-	-	-	-	-	13.0	-	13.8

IR Illuminator (IR Models)	AMIR/PMIR	24 pcs 850nm LEDs / 50ft (15m) IR distance (max) / 40° IR angle
	PMTIR	24 pcs 850nm LEDs / 120ft (36m) IR distance (max) / 30° IR angle
	Total PoE Solution (No external power requirement)	

Audio Electrical (-A and -AH Models)	Streaming	Two-way
	Compression	G.711 PCM 8 kHz
	Input/output	Microphone in or line in / line output

Heater Electrical (-H and -AH Models)	Power Consumption	2.28 W Max
	Switch	On: 4°C (32.9°F), Off: 6.5°C (43.7°F)
	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, 90° tilt and 360° z-axis	
	Total Unit Dimensions	Unit	Ø 5.5" (140mm) x 4.9" H (125mm)
		Packaged	8" W (203mm) x 7.5" L (190mm) x 6" H (152mm)
	Weight	Unit	2.25 lbs (1.02kg)
		Packaged	2.85 lbs (1.27kg)
	On Board Storage	SDHC slot up to 32GB (Card not included)	



Accessories	SV-JBA	Junction Box Adapter
	SV-EBA	Electrical Box Adapter
	MD-PMA	Pole Mount Adapter
	MD-CRMA	Corner Mount Adapter
	MD-WMT2	Wall Mount (Fit 1.5" NPT)
	MD-CMT	Ceiling Mount (Fit 1.5" NPT)
	MD-FMA	Flush Mount Adapter
	MD-CAP	Wall Mount Cap Only w/ 1.5" NPT