

SurroundVideo® G5 Mini IP Megapixel Cameras

H.264 All-in-One 180° or 360° Panoramic True Day/Night Indoor/Outdoor Dome IP Cameras with WDR (Wide Dynamic Range) Models



The SurroundVideo® G5 Mini is an H.264 all-in-one total PoE panoramic IP camera solution available in 12 megapixel (12MP) or 20MP resolutions for both 180° or 360° configurations. Wide Dynamic Range (WDR) is optional on 12MP models, featuring a dynamic range of up to 100dB at full resolution. With a dual encoder (H.264 and MJPEG), an impact-resistant dome, and a size roughly 50% smaller than previous SurroundVideo models,

the SurroundVideo G5 Mini delivers excellent performance and versatility. Additionally, the SurroundVideo G5 Mini has faster frame rates than ever before. A SurroundVideo camera can replace multiple fixed or PTZ cameras by recording the entire panoramic field of view with the ability to zoom into multiple regions of interest for a return on investment that's easily measured.



180° Panoramic



360° Panoramic

Wide Dynamic Range
on Select 12MP ModelsTrue Day/Night
with IR Cut Filter

Pixel Binning Mode



Installer Friendly

Impact / Weather
Resistant IK-10
and IP66 RatedAll-in-One PoE
and Integrated LensesDual Encoder
H.264/MJPEG

Series Features

- 12 and 20MP Models
- True Day/Night Functionality with Electro-Mechanical IR Cut Filter
- Forensic Zooming – Zoom Live or After the Event While Recording Full Field-of-View in HD – Replace PTZ Devices
- Optional True WDR up to 100dB at Full Resolution Available on Select 12MP Models: See Clearly in Shaded and Bright Light Conditions
- Binning Mode for Strong Low Light Performance
- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control, Multi-Streaming, Multicasting, and Forensic Zooming
- Total PoE Solution and Auxiliary Power: 18–48V DC/24V AC
- Easily Adjustable 2-Axis Camera Gimbal with 360° Pan and 90° Tilt
- +/- 5° Electrical Vertical Alignment to Locate Each Sensor Position (180° Series)
- +/- 7° Mechanical Tilt Adjustment to Locate Each Sensor Angle (360° Series)
- Outdoor Rated IP66 and IK-10 Impact-Resistant Housing
- Dual Encoder H.264/MJPEG

Camera Imaging Specifications

Model		AV12586DN	AV12566DN	AV12585DN	AV12565DN	AV20585DN	AV20565DN
Image Sensor (CMOS)		12MP = 3MP x 4	12MP = 3MP x 4	12MP = 3MP x 4	12MP = 3MP x 4	20MP = 5MP x 4	20MP = 5MP x 4
H-FOV		180°	360°	180°	360°	180°	360°
Optical Format		1/3.2" Progressive Scan	1/3.2" Progressive Scan	1/3" Progressive Scan	1/3" Progressive Scan	1/2.5" CMOS	1/2.5" CMOS
Pixel Pitch		2.2µm	2.2µm	2.2µm	2.2µm	2.2µm	2.2µm
Minimum Illumination	Color	0.2 Lux	0.1 Lux	0.2 Lux	0.2 Lux	0.3 Lux	0.3 Lux
	Color Binning	0.1 Lux	0.1 Lux	0.1 Lux	0.1 Lux	0.15 Lux	0.15 Lux
	True Day/Night	0.02 Lux	0.02 Lux	0.02 Lux	0.02 Lux	0.03 Lux	0.03 Lux
Full FOV Resolution	Total	8192 H x 1536 V	8192 H x 1536 V	8192 H x 1536 V	8192 H x 1536 V	10240 H x 1920 V	10240 H x 1920 V
	Per Sensor	2048 H x 1536 V	2048 H x 1536 V	2048 H x 1536 V	2048 H x 1536 V	2560 H x 1920 V	2560 H x 1920 V
1/4 Resolution	Total	4096 H x 768 V	4096 H x 768 V	4096 H x 768 V	4096 H x 768 V	5120 H x 960 V	5120 H x 960 V
	Per Sensor	1024 H x 768 V	1024 H x 768 V	1024 H x 768 V	1024 H x 768 V	1280 H x 960 V	1280 H x 960 V
Dynamic Range		Up to 100dB at Full Resolution	Up to 100dB at Full Resolution	69.5dB	69.5dB	70.1dB	70.1dB
Frame Rates	Full Resolution	10fps (8192 x 1536)	10fps (8192 x 1536)	10fps (8192 x 1536)	10fps (8192 x 1536)	7fps (10240 x 1920)	7fps (10240 x 1920)
	1/4 Resolution	14fps (4096 x 768)	14fps (4096 x 768)	14fps (4096 x 768)	14fps (4096 x 768)	10fps (5120 x 960)	10fps (5120 x 960)
	Binning Mode	14fps (5120 x 960)	14fps (5120 x 960)	29fps (5120 x 960)	29fps (5120 x 960)	24fps (5120 x 960)	24fps (5120 x 960)
Lens		5.4mm, M12, F2.0, 1/3.2"	2.6mm, M12, F2.0, 1/2.5"	5.4mm, M12, F2.0, 1/3.2"	2.6mm, M12, F2.0, 1/2.5"	6.7mm, M12, F2.0, 1/2.5"	3.6mm, M12, F1.8, 1/2.5"

Programmability

Optics	Pixel Binning Mode
Programmable Shutter Speed	Controls motion blur
	1ms – 500ms
Motion Detection	Real-time, privacy mask, 1024 detection zones per sensor
MoonLight™ Mode	Extended exposure and proprietary 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 Alignment	+/-5° digital vertical alignment to adjust images (180° models)
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
Miscellaneous	Programmable resolution, brightness, saturation, gamma, tint
	Electronic pan, tilt, zoom (PTZ)
	Simultaneous delivery of full field-of-view and zoomed images

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
Network Interface	100Base-T Ethernet
Multi-Streaming	8 non-identical streams (2 per sensor)

Compliance

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	IP66 (EN60529)

Environmental

Protection Ratings	IP66 water/dust protection rating
	IK-10 impact-resistant polycarbonate dome
Operating temperature	-40°C (-40°F) to +50°C (122°F)
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	18–48V DC and 24V AC
Power Consumption	12.1 Watts Max DC Power

Mechanical

Casing	Die-cast aluminum cover and 4" polycarbonate dome bubble	
	IP66 weather proof standard	
	Impact resistant, IK-10 rated	
Gimbal	Easily adjustable, 2-axis w/360° pan and 90° tilt	
Dimensions (See Dimensions on Page 3)	Unit	Ø 5.77" (146.7mm) x 5" H (128mm)
	Bubble Only	Ø 4.0" (102mm) x 2.4" H (62mm)
	Packaged	6.7" W (170mm) x 6.7" L (170mm) x 5.7" H (145mm)
Weight	Unit	3.0lbs (1.36kg)
	Packaged	3.6lbs (1.63kg)

Ordering Information



Model Specific Features

Model	Resolution	Configuration	Frame Rate	Features	
AV12586DN	12MP	180° Panoramic	10fps	WDR	Binning
AV12566DN	12MP	360° Panoramic	10fps	WDR	Binning
AV12585DN	12MP	180° Panoramic	10fps	-	Binning
AV12565DN	12MP	360° Panoramic	10fps	-	Binning
AV20585DN	20MP	180° Panoramic	7fps	-	Binning
AV20565DN	20MP	360° Panoramic	7fps	-	Binning

Configurations



180° Panoramic



360° Panoramic

Model Numbers

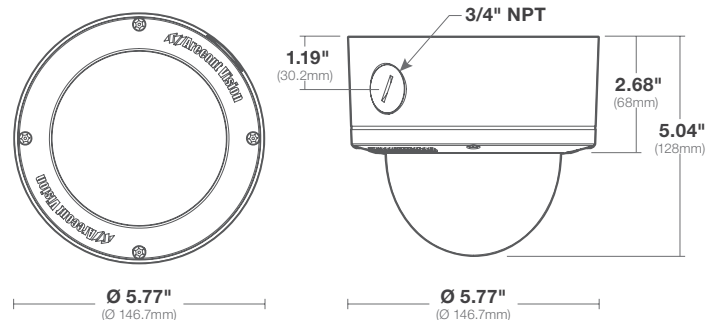
12MP	AV12586DN	WDR	AV12566DN	WDR
	AV12585DN		AV12565DN	
20MP	AV20585DN		AV20565DN	

Accessories

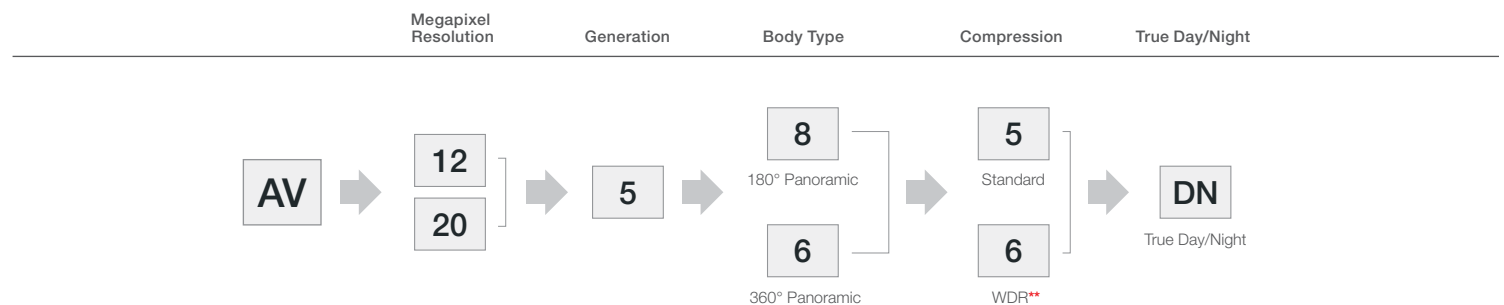
AV-CRMA	Corner mount adapter
AV-FMA	Flush mount for MegaDome® Series and SurroundVideo® G5 Mini
AV-JBA*	Junction box adapter
AV-PMA	Pole mount adapter
AV-PMJB	Pendant mount with 1.5" NPT standard
AV-WMJB	Wall mount with 1.5" NPT standard
MD-CAP	Mounting cap for MegaDome® Series and SurroundVideo® G5 Mini

* Replacement part for AV-PMJB and AV-WMJB

Dimensions



Create Your Model (Example: AV12586DN)



** WDR for 12MP models only