

SurroundVideo® 2 IP Megapixel Dome Cameras

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

Camera Models

12 Megapixel	12 Megapixel WDR	20 Megapixel
AV12187DN	AV12186DN	AV20187DN
AV12367DN	AV12366DN	AV20367DN



180° Panoramic

360° Panoramic

The H.264 12MP SurroundVideo® 2 is the industry's first wide dynamic range panoramic camera. The new SurroundVideo® 2 is an all-in-one solution, has a dual encoder (H.264 and MJPEG), a vandal-resistant dome, and is 50% smaller than previous SurroundVideo® models. 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—a return on investment that's easily measured.



180° Panoramic



360° Panoramic



Wide Dynamic Range (12MP Models)



True Day/Night with IR Cut Filter



Pixel Binning Mode



Impact / Weather Resistant IK-10 and IP66 Rated



All-in-One Dome Solution with Integrated Lenses



Dual Encoder H.264/MJPEG

Features:

- True WDR up to 100dB at Full Resolution: See Clearly in Shaded and Bright Light Conditions Simultaneously on AV12186DN and AV12366DN
- Forensic Zooming – Zoom Live or After the Event While Recording Full Field-of-View in HD – Replace PTZ Devices
- Binning Mode for Strong Low Light Performance
- True Day/Night Functionality with Mechanical IR Cut Filter
- Outdoor Rated IP66 and IK-10 Impact-Resistant Housing
- Total PoE Solution (No External Power Required for Heater and IR LEDs)
- PoE and Auxiliary Power: 12–48V 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)
- Complete Mounting Options
- Dual Encoder H.264/MJPEG

- Privacy Mask, Motion Detection, Flexible Cropping, Bit Rate Control and Multi-Streaming
- Fast Frame Rates
- Reduced Overall System Cost

Model Specific Features

Model	Resolution	Configuration	Frame Rate	Features	
AV12187DN	12MP	180° Panoramic	00fps	–	Binning
AV12367DN	12MP	360° Panoramic	00fps	–	Binning
AV12186DN	12MP	180° Panoramic	00fps	WDR	Binning
AV12366DN	12MP	360° Panoramic	00fps	WDR	Binning
AV20187DN	20MP	180° Panoramic	00fps	–	Binning
AV20367DN	20MP	360° Panoramic	00fps	–	Binning

Camera Imaging Specifications

Model	AV12187DN	AV12367DN	AV12186DN	AV12366DN	AV20187DN	AV20367DN	
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	1/2"	1/2.5"	1/2.5"	1/2.5"	1/2.5"	1/2.3"	
Pixel Pitch	4.2µm	2.2µm	2.2µm	2.2µm	2.2µm	1.67µm	
Minimum Illumination	Color	0.1 Lux	0.3 Lux	0.3 Lux	0.3 Lux	0.42 Lux	
	Color Binning	-	0.15 Lux	0.15 Lux	0.15 Lux	0.21 Lux	
	Day/Night	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	Total	6400 H x 1200 V	10240 H x 1920 V	10240 H x 1920 V	10240 H x 1920 V	14592 H x 2752 V	
	Per Sensor	1600 H x 1200 V	2560 H x 1920 V	2560 H x 1920 V	2560 H x 1920 V	3648 H x 2752 V	
1/4 Resolution	Total	3200 H x 600 V	5120 H x 960 V	5120 H x 960 V	5120 H x 960 V	7296 H x 1376 V	
	Per Sensor	800 H x 600 V	1280 H x 960 V	1280 H x 960 V	1280 H x 960 V	1824 H x 1376 V	
Dynamic Range	61dB		70.1dB		70.1dB		
Frame Rates	Full Resolution	6fps (6400x1200)	3.5fps (10240x1920) 4.2fps (10240x1600)	3.5fps (10240x1920) 4.2fps (10240x1600)	3.5fps (10240x1920) 4.2fps (10240x1600)	3.5fps (10240x1920) 4.2fps (10240x1600)	1.5fps (14592x2752)
	1/4 Resolution	20fps (3200x600)	11fps (5120x960)	11fps (5120x960)	11fps (5120x960)	11fps (5120x960)	5.5fps (7296x1376)
	Binning Mode	-	13fps (5120x960)	13fps (5120x960)	13fps (5120x960)	13fps (5120x960)	6.5fps (7296x1376)
Lens	CS, F1.8, 7.8mm, IR, H-FOV = 47°	CS, F1.8, 6.2mm, H-FOV = 47°	CS, F1.8, 6.2mm, H-FOV = 47°	CS, F1.8, 6.2mm, H-FOV = 47°	CS, F1.8, 3.5mm, H-FOV = 96°	CS, F2.4, 7.2mm, H-FOV = 47°	

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)

Image Settings

Auto adjustment between WDR and LDR modes on WDR models
Flexible Cropping (resolution windowing down to 1x1 pixel for JPEG and 2x2 pixels for H.264)
+/-5° Digital Vertical Alignment to adjust images (AV12186DN)
Auto Exposure (AE) and Gain Control (AGC) > 120dB
On-camera real-time motion detection with up to 1024 detection zones (per sensor)
Custom white balance
Electronic pan, tilt, zoom (PTZ)
Programmable shutter speed to help control motion blur
MoonLight™ Mode: extended exposure and proprietary noise cancellation
Programmable resolution, brightness, saturation, gamma, sharpness, tint
Simultaneous delivery of full field-of-view and zoomed images
Bandwidth and storage savings by running at 1/4 resolution
Bit rate and bandwidth limit control

Compliance

Industry Standard	ONVIF Profile S Conformant
Listings	UL (CB)
FCC Compliance	47 CFR 15 Class A
Environmental	RoHS, REACH, WEEE

Electrical

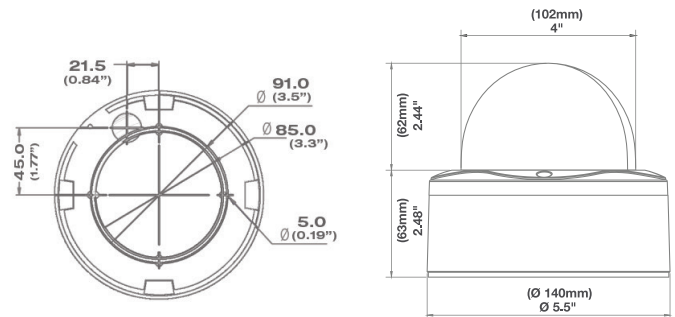
Input/Output	General purpose opto-coupled
Power Over Ethernet	PoE 802.3af, Class 3
Auxiliary Power	12-48V DC and 24V AC
Max Power Consumption	14 Watts Max (Auxiliary Power)
Power Supply	50/60Hz selectable flicker control

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) w/Heater
Humidity	0% to 90% (non-condensing)
Stable Image Temperature	0°C (32°F) to +50°C (122°F)
Storage Temperature	-30°C (-22°F) to +60°C (140°F)

Mechanical

Casing	Die-cast aluminum chassis with 4" polycarbonate dome bubble	
Gimbal	Easily adjustable, 2-axis w/360° pan and 90° tilt	
Total Unit Dimensions	Unit	Ø 5.5" (140mm) x 4.9" H (125mm)
	Bubble Only	Ø 4.0" (102mm) x 2.4" H (62mm)
Weight	Unit	2.8lbs (1.27kg)
	Packaged	3.4lbs (1.54kg)



Accessories

MD-CAP	Wall Mount Cap Only w/1.5" NPT
MD-CMT	Pendant Mount
MD-CRMA	Corner Mount Adapter
MD-EBA	Electrical Box Adapter
MD-FMA	Flush Mount
MD-PMA	Pole Mount Adapter
MD-WMT2	Wall Mount w/1.5" NPT
SV-EBA	Electrical Box Adapter for MD-WMT2
SV-JBA	Junction Box Adapter