SurroundVideo® IP Megapixel Dome Cameras

8–40MP H.264 All-in-One 180° and 360° Panoramic True Day/Night Indoor/Outdoor Dome IP Cameras with WDR (Wide Dynamic Range) Models

WDR 180° Panoramic

WDR 360° Panoramic

180° Panoramic

360° Panoramic

ONVIF | S

180° and 360° Panoramic Coverage with Exceptional Resolution – **Surround**Video

SurroundVideo panoramic view IP megapixel cameras provide all-in-one solutions for wide area video surveillance. Four sensors and lenses are housed in a impact-resistant IP66 dome enclosure. The cameras are available in 180° and 360° configurations and resolutions of 8-, 12-WDR, 20- and 40- megapixels (MP). A single SurroundVideo panoramic camera can replace multiple conventional cameras with the ability to zoom into multiple regions of interest.

Highlighted Features:

- Industry's First 8MP, 12MP, 20MP and 40MP Panoramic Megapixel Cameras
- Optional True WDR up to 100dB at Full Resolution Available on 12MP Models: See Clearly in Shaded and Bright Light Conditions Simultaneously
- 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 in 12MP, 20MP and 40MP Models
- Bit Rate Control and Multi-Streaming
- True Day/Night Functionality with Mechanical IR Cut Filter
- Outdoor Rated IP66 and IK-10 Impact-Resistant Housing
- Total PoE Solution (WDR Models)

- 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)
- +/- 10° (+/- 7° WDR) Mechanical Tilt Adjustment to Locate Each Sensor Angle (360° Series)
- Complete Mounting Options
- Dual Encoder H.264/MJPEG
- Privacy Mask, Motion Detection and Flexible Cropping
- Fast Frame Rates
- ONVIF Profile S Conformant

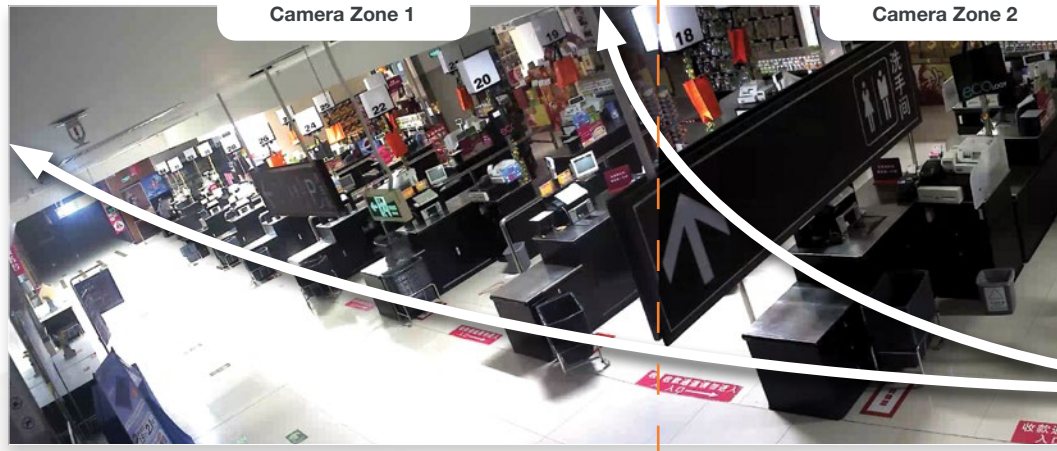| 180° Panoramic	360° Panoramic (8–20MP Models)	True Day/Night with IR Cut Filter	All-in-One Dome Solution with Integrated Lenses	Impact / Weather Resistant IK-10 and IP66 Rated	Pixel Binning Mode (12–40MP Models)	Wide Dynamic Range (12MP Models)	Heater/Blower (8, 20, and 40MP Models)	Dual Encoder H.264/MJPEG

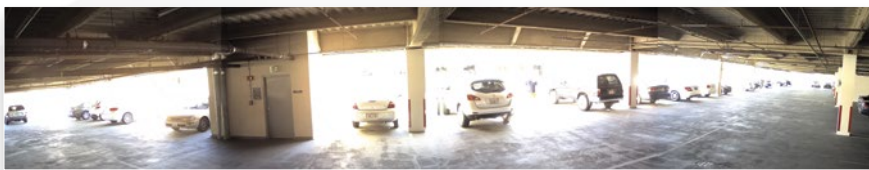Stitched image from an 8MP SurroundVideo 180° camera in a financial services environment

Higher Resolution up to 40 Megapixels + Panoramic Field of View = Greater ROI
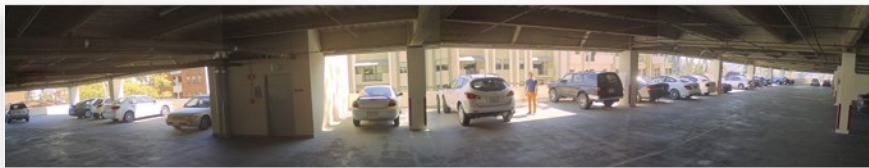
Arecont Vision megapixel technology delivers superior image quality and reduces overall system costs by covering larger areas with fewer cameras. An area typically requiring multiple pan-tilt-zoom (PTZ) cameras or multiple fixed cameras can be covered with a single SurroundVideo® panoramic camera. The cameras deliver comprehensive coverage and forensic detail, all without the need for an operator to direct them or the propensity to be facing the wrong way when an incident occurs. Highly cost-efficient solutions, SurroundVideo panoramic cameras virtually obsolete the need for and related expense of PTZ cameras.

Camera Zone 1

Camera Zone 2

Compact 180° and 360° **Mega**Dynamic® Wide Dynamic Range (WDR)
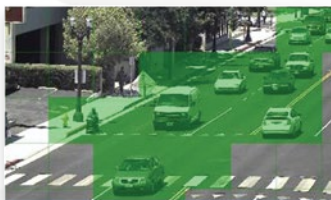
Megapixel image without WDR
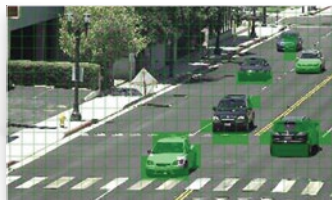
Megapixel image with WDR

Less than half the size of other SurroundVideo models, the 12MP SurroundVideo WDR cameras (AV12186DN and AV12366DN) produces clear images in extreme lighting conditions. Our WDR technology delivers a dynamic range of up to 100dB at full resolution and without lowering frame rates, maximizing the amount of detail in both bright and dark areas of a scene. The WDR performance of Arecont Vision cameras represents an up to 50dB improvement (300x) in dynamic range compared to non-WDR cameras.
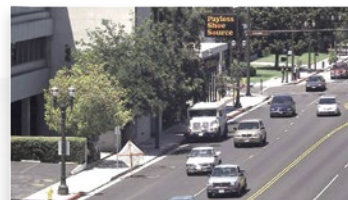
Extended Motion Detection*

64 Zones

1,024 Zones

Extended motion detection offers a high granularity grid of 1,024 distinct motion detection zones.

*Examples shown with one of four sensors

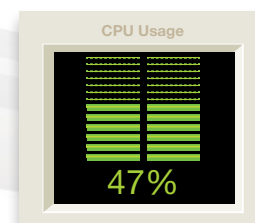## Privacy Mask*

Normal

Masked

Privacy mask is the ability to select multiple regions of an arbitrary shape and block the video. It is supported by both HTTP and TFTP protocols, and features an on-board web interface.
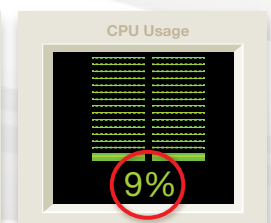
*Examples shown with one of four sensors

Compliant H.264 Compression

SurroundVideo's compliant implementation of H.264 allows full frame rates and full resolution without sacrificing image quality. With bit rate control, the CPU load is decreased at both the client (decompression) side and the server/storage side, allowing lower bandwidth and storage relative to MJPEG. Real Time Streaming Protocol (RTSP) allows for compatibility with media players such as Apple QuickTime®, VLC and others.
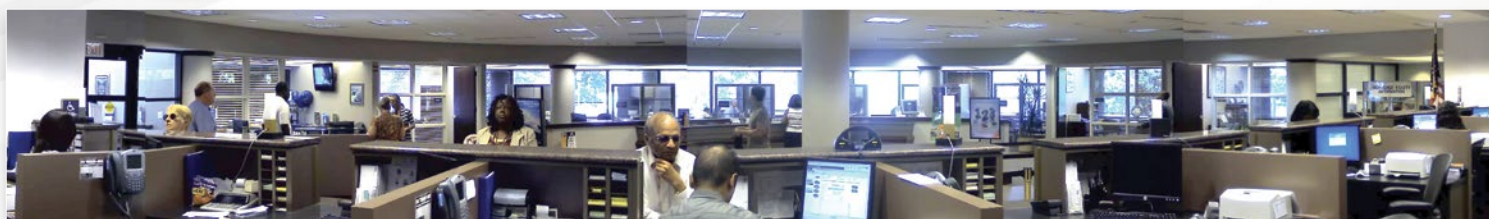
H.264 Decompression (example)

CPU Usage

CPU Usage

47%

9%

2MP with live video in MJPEG

2MP with live video in H.264

SurroundVideo® IP Megapixel Dome Cameras

Made in the USA

Camera Zone 3 **Camera Zone 4**

NOTE: Confirm with your Video Management System / Network Video Recorder Manufacturer regarding how these four sensor cameras will appear in their systems

Stitched image from a SurroundVideo 180° camera in a banking environment

Stitched image from a SurroundVideo 180° camera in a retail environment
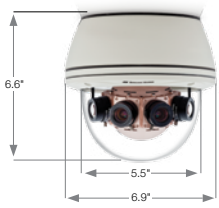
Product Comparison

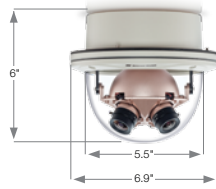| Model	Panoramic Configuration	Sensor	Resolution	Max Frame Rate @ Full Resolution	Minimum Illumination	Lens	WDR	H.264 MJPEG	True Day/Night	Binning Mode	Heater/Blower Option
AV8185DN	180°	8MP (2MP x 4)	6400 x 1200	6fps	Color: 0.2 Lux B/W: 0 Lux, IR Sensitive	CS, 7.8mm, 1/2", F1.8, IR, H-FOV = 47°		•	•		•
AV8365DN	360°	8MP (2MP x 4)	6400 x 1200	6fps	Color: 0.2 Lux B/W: 0 Lux, IR Sensitive	CS, 3.5mm, 1/2", F1.8, IR, H-FOV = 96°		•	•		•
AV8185CO	180°	8MP (2MP x 4)	6400 x 1200	6fps	Color: 0.2 Lux	CS, 7.8mm, 1/2", F1.8, IR, H-FOV = 47°		•			•
AV8365CO	360°	8MP (2MP x 4)	6400 x 1200	6fps	Color: 0.2 Lux	CS, 3.5mm, 1/2", F1.8, IR, H-FOV = 96°		•			•
AV12186DN	180°	12MP (3MP x 4)	8192 x 1536	5.2fps	Color (Non-Binning): 0.5 Lux Color (Binning): 0.25 Lux B/W: 0 Lux, IR Sensitive	M12, 5.4mm, 1/3.2", F2.0, IR, H-FOV = 47°	•	•	•	•	Comes with Blower
AV12366DN	360°	12MP (3MP x 4)	8192 x 1536	5.2fps	Color (Non-Binning): 0.5 Lux Color (Binning): 0.25 Lux B/W: 0 Lux, IR Sensitive	M12, 2.6mm, 1/2.5", F2.0, IR, H-FOV = 96°	•	•	•	•	Comes with Blower
AV20185DN	180°	20MP (5MP x 4)	10240 x 1920	3.5fps	Color (Non-Binning): 0.3 Lux Color (Binning): 0.15 Lux B/W: 0 Lux, IR Sensitive	CS, 6.2mm, 1/2.5", F1.8, IR, H-FOV = 47°		•	•	•	•
AV20365DN	360°	20MP (5MP x 4)	10240 x 1920	3.5fps	Color (Non-Binning): 0.3 Lux Color (Binning): 0.15 Lux B/W: 0 Lux, IR Sensitive	CS, 3.5mm, 1/2.5", F1.8, IR, H-FOV = 96°		•	•	•	•
AV20185CO	180°	20MP (5MP x 4)	10240 x 1920	3.5fps	Color (Non-Binning): 0.3 Lux Color (Binning): 0.15 Lux	CS, 6.2mm, 1/2.5", F1.8, IR, H-FOV = 47°		•		•	•
AV20365CO	360°	20MP (5MP x 4)	10240 x 1920	3.5fps	Color (Non-Binning): 0.3 Lux Color (Binning): 0.15 Lux	CS, 3.5mm, 1/2.5", F1.8, IR, H-FOV = 96°		•		•	•
AV40185DN	180°	40MP (10MP x 4)	14592 x 2752	1.5fps	Color (Non-Binning): 0.3 Lux Color (Binning): 0.15 Lux B/W: 0 Lux, IR Sensitive	CS, 7.2mm, 1/2.3", F2.4, IR, H-FOV = 47°		•	•	•	•

Onvif | S

Arecont Vision®

Configuration

SurroundVideo (8MP, 20MP and 40MP Models)

6.6"

5.5"
6.9"

Surface Mount

6"

5.5"
6.9"

In-Ceiling Mount

SurroundVideo WDR (12MP Models)

5"

4"
5.5"

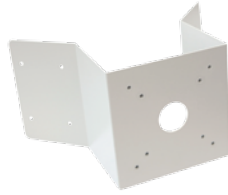**Surface Mount**

Accessories (Sold Separately)

AV-CRMA
Corner Mount Adapter

AV-EBA
Electrical Box Adapter Plate for SV-WMT, MD-WMT2, HSG2-WMT, MicroDome® and MegaView®

AV-JBA
Junction Box Adapter for HSG2-WMT, D4S-WMT. Replacement Part for: MegaView® 2, AV-PMJB, AV-WMJB

AV-PMA
Pole Mount Adapter

AV-PMJB
Pendant Mount Bracket with Junction Box (Mount Cap not included) for SurroundVideo Omni Series – 1.5" NPT Female

AV-WMJB
Wall Mount Bracket with Junction Box (Mount Cap not included) for SurroundVideo Omni Series – 1.5" NPT Female

SV-CAP
Cap only for 8MP, 20MP and 40MP Panoramic SurroundVideo Models – 1.5" NPT Male

SV-FMA
False Ceiling Flush Mount Adapter for Day/Night Panoramic Series

Global Sales and Support

Arecont Vision is the leading manufacturer of high-performance megapixel IP cameras and associated software.

Americas

Los Angeles, CA, USA
Arecont Vision, LLC. Headquarters
425 E. Colorado St., 7th Floor
Glendale, CA 91205, USA

Phone: +1.818.937.0700
Toll Free: 877.CAMERA.8
Fax: +1.818.937.0464

Sales
Phone: +1.818.937.0700 x 3
Email: avsales@arecontvision.com

Support
Phone: +1.818.937.0700 x 1
Email: support@arecontvision.com

Latin America
Email: latam.sales@arecontvision.com

EMEA

Düsseldorf, Germany
Phone: +49.69.6953.4600
Email: europe.sales@arecontvision.com

Moscow, Russia
CJSC Arecont Vision
Phone: +7.495.649.0577
Fax: +7.495.221.5227
Email: info@arecontvision.ru

Middle East
Email: mena.sales@arecontvision.com

Africa
Email: africa.sales@arecontvision.com

APAC

China
Phone: +86.180.0179.1799
Alt. Phone: +1.818.937.0700 x 3
Fax: +1.818.649.3404
Email: apac.sales@arecontvision.com

Arecont Vision®