SurroundVideo® Omni IP Megapixel Cameras

12MP WDR or 20MP H.264 All-in-One Omni-Directional User-Configurable Multi-Sensor True Day/Night Indoor/Outdoor Dome IP Cameras

Delivering revolutionary flexibility, Arecont Vision SurroundVideo® Omni multi-sensor, multi-megapixel cameras provide ample resolution to zoom-in for details in live and recorded video. With multiple imagers, each with a choice of an IR corrected lens, one SurroundVideo® Omni can replace 4 standard cameras, requiring just a single installation with only one ethernet cable.

A unique track design allows four individual sensor gimbals to be independently placed in nearly any configuration. Popular uses of SurroundVideo® Omni IP66 rated / IK-10 impact-resistant cameras are to cover the intersection of hallways or to provide a 270° view at the corner of a building.

SurroundVideo® Omni cameras are available in total resolutions of 12 megapixels (MP) or 20 megapixels. Optional lenses can be selected from a choice of 2.8, 4, 6, 8, 12 and 16mm. Wide Dynamic Rage (WDR) that delivers up to 100dB at full resolution is available in the 12MP model. H.264 compression reduces bandwidth and storage requirements, while delivering full frame rates and resolution, without sacrificing image quality.
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® Omni multi-sensor camera. SurroundVideo® Omni delivers comprehensive coverage and forensic detail. It is user-configurable to achieve maximum coverage in the desired areas of interest. As a result, SurroundVideo® Omni eliminates the propensity of a PTZ to be facing the wrong way when an incident occurs.
### Model Comparison

<table>
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<tr>
<th>Model</th>
<th>Sensor</th>
<th>Full Resolution</th>
<th>Max Frame Rate @ Full Resolution</th>
<th>Minimum Illumination</th>
<th>Lens Description</th>
<th>H.264/ MJPEG</th>
<th>True Day/Night</th>
<th>WDR</th>
<th>Binning Mode</th>
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</thead>
<tbody>
<tr>
<td>AV12176DN-NL</td>
<td>3MP x 4 (12MP)</td>
<td>8192 x 1536 = 12MP</td>
<td>5.2fps</td>
<td>Color (Non-Binning): 0.5 Lux Color (Binning): 0.15 Lux B/W: 0 Lux, IR Sensitive</td>
<td>Sold Separately</td>
<td>*</td>
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</tr>
<tr>
<td>AV12176DN-28</td>
<td>3MP x 4 (12MP)</td>
<td>8192 x 1536 = 12MP</td>
<td>5.2fps</td>
<td>Color (Non-Binning): 0.5 Lux Color (Binning): 0.15 Lux B/W: 0 Lux, IR Sensitive</td>
<td>M12, 2.8mm, 1/2.5”, F1.8, Fixed Iris, H-FOV = 89°</td>
<td>*</td>
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<tr>
<td>AV12176DN-08</td>
<td>3MP x 4 (12MP)</td>
<td>8192 x 1536 = 12MP</td>
<td>5.2fps</td>
<td>Color (Non-Binning): 0.5 Lux Color (Binning): 0.15 Lux B/W: 0 Lux, IR Sensitive</td>
<td>M12, 8mm, 1/2.5”, F1.6, Fixed Iris, H-FOV = 33°</td>
<td>*</td>
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</tr>
<tr>
<td>AV20175DN-NL</td>
<td>5MP x 4 (20MP)</td>
<td>10240 x 1920 = 20MP</td>
<td>3.5fps</td>
<td>Color (Non-Binning): 0.3 Lux Color (Binning): 0.15 Lux B/W: 0 Lux, IR Sensitive</td>
<td>Sold Separately</td>
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<tr>
<td>AV20175DN-28</td>
<td>5MP x 4 (20MP)</td>
<td>10240 x 1920 = 20MP</td>
<td>3.5fps</td>
<td>Color (Non-Binning): 0.3 Lux Color (Binning): 0.15 Lux B/W: 0 Lux, IR Sensitive</td>
<td>M12, 2.8mm, 1/2.5”, F1.8, Fixed Iris, H-FOV = 113°</td>
<td>*</td>
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</tr>
<tr>
<td>AV20175DN-08</td>
<td>5MP x 4 (20MP)</td>
<td>10240 x 1920 = 20MP</td>
<td>3.5fps</td>
<td>Color (Non-Binning): 0.3 Lux Color (Binning): 0.15 Lux B/W: 0 Lux, IR Sensitive</td>
<td>M12, 8mm, 1/2.5”, F1.6, Fixed Iris, H-FOV = 40°</td>
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</tbody>
</table>

### Options

- **-NL**
  - No Lenses (User Configurable and Ordered Separately)

- **-28**
  - Configured with 2.8mm Lenses, typical for many 270° Corner Mount configurations

- **-08**
  - Configured with 8mm Lenses, typical for many hallway intersections

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**MegaDynamic® Wide Dynamic Range (WDR)**

The 12MP SurroundVideo® Omni camera produces clear images in extremely challenging lighting conditions. Arecont Vision’s WDR technology delivers a dynamic range of up to 100dB at full resolution, without lowering frame rates. WDR maximizes the amount of detail in both bright and dark areas of a scene. The WDR performance of the SurroundVideo® Omni megapixel camera represents an up to 50dB improvement (300x) in dynamic range compared to non-WDR cameras.

**Enhanced Low Light Performance**

As part of their superior True Day/Night operation, SurroundVideo® Omni cameras include low light enhancing technology with a mechanical IR (infrared) cut filter, pixel binning and adaptive noise-cancellation. Day/Night capability automatically switches from color to black/white operation to increase sensitivity and image clarity at night or in unlit spaces.

**Compliant H.264 Compression by Arecont Vision**

SurroundVideo® Omni’s compliant implementation of H.264 allows full frame rates and full resolution without sacrificing image quality. With bit rate control, the CPU load of the NVR or VMS servers is decreased at both the client (decompression) side and the server/storage side. This allows lower bandwidth and storage relative to MJPEG. Real Time Streaming Protocol (RTSP) allows for compatibility with Apple QuickTime®, VLC and other media players.
Accessory Configurations

Ceiling Mount  Wall Mount  Pole Mount  Corner Mount

Accessories

<table>
<thead>
<tr>
<th>SO-CAP</th>
<th>Cap for SurroundVideo® Omni</th>
</tr>
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<tbody>
<tr>
<td>AV-WMJB</td>
<td>Wall Mount Adapter with Junction Box</td>
</tr>
<tr>
<td>AV-PMJ</td>
<td>Pendant Mount Adapter with Junction Box</td>
</tr>
<tr>
<td>AV-PMA</td>
<td>Pendant Mount Adapter</td>
</tr>
<tr>
<td>AV-CRMA</td>
<td>Corner Mount Adapter</td>
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<td>SV-EBA</td>
<td>Electrical Box Adapter</td>
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Lens Options

<table>
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<tr>
<th>Focal Length</th>
<th>2.8mm</th>
<th>4mm</th>
<th>6mm</th>
<th>8mm</th>
<th>12mm</th>
<th>16mm</th>
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<tbody>
<tr>
<td>F Stop</td>
<td>F1.6</td>
<td>F1.6</td>
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<tr>
<td>Horizontal FOV</td>
<td>3MP WDR</td>
<td>89</td>
<td>63</td>
<td>43</td>
<td>33</td>
<td>22</td>
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<tr>
<td></td>
<td>5MP</td>
<td>113</td>
<td>80</td>
<td>55</td>
<td>40</td>
<td>28</td>
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<tr>
<td>Option</td>
<td>Standard (-28 Models)</td>
<td>Ordered Separately</td>
<td>Ordered Separately</td>
<td>Standard (-08 Models)</td>
<td>Ordered Separately</td>
<td>Ordered Separately</td>
</tr>
<tr>
<td>Part Number</td>
<td>MPM2.8</td>
<td>MPM4.0</td>
<td>MPM6.0</td>
<td>MPM8.0</td>
<td>MPM12.0</td>
<td>MPM16.0</td>
</tr>
</tbody>
</table>

Global Sales and Support

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

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