Megapixel Cameras with True Wide Dynamic Range

Arecont Vision megapixel technology delivers superior image quality and reduces overall system costs by covering larger areas with fewer cameras. Now, our industry-leading multi-megapixel cameras offer the added benefit of true wide dynamic range (WDR) performance at full resolution and without lowering frame rates. By combining long and short exposures in the same field-of-view, WDR maximizes the amount of detail in both bright and dark areas of a scene.

Arecont Vision WDR cameras are available in resolutions of 1080p, 3-megapixels and 12-megapixel panoramic. Our WDR technology delivers a dynamic range of up to 100dB. The WDR performance of Arecont Vision cameras represents an up to 50dB improvement (300x) in dynamic range compared to non-WDR cameras. WDR models are available in four camera series.

Global Sales and Support
Arecont Vision is the leading manufacturer of high-performance megapixel IP cameras and associated software. All Arecont Vision cameras are made in the USA.
Arecont Vision wide dynamic range technology is designed for high contrast surveillance applications that require high resolution, low bandwidth images at an affordable price point. Non-WDR megapixel cameras provide a dynamic range up to 70dB. In surveillance applications such as a building lobby with large windows or on a loading dock with bright sunlight shining through the open doors, cameras will typically be adjusted for either the bright or dark areas of the scene. By widening the dynamic range to 100dB with technology that maximizes both the bright and dark areas in the field-of-view, Arecont Vision WDR cameras deliver clear images of the entire scene.

What is Wide Dynamic Range?

Zoom make MegaDome® 2 the easiest to install camera in our product line. These indoor/outdoor all-in-one solutions integrate a 1080p or 3-megapixel camera with the fastest frame rates in the industry and includes 1024-zone motion detection and flexible privacy masking. Choose PoE (Power over Ethernet) or auxiliary power. 12–48V DC/24V AC.

Advantages of WDR IP Cameras from Arecont Vision

SurroundVideo® with Wide Dynamic Range

The SurroundVideo® 12-Megapixel WDR 180° Panoramic Camera provides a wide field-of-view with ample resolution to zoom-in for details in live video. SurroundVideo® delivers the fastest frame rates in the industry and integrates four sensors with IR corrected lenses into an IP66 environmental ratedIK-10 impact resistant dome housing (the size of our single-sensor MegaDome® 2 camera). H.264 compression reduces bandwidth and storage requirements while delivering full frame rates and full resolution without sacrificing image quality. Binning mode increases low light sensitivity. Easily adjustable 2-axis gimbal with 360° pan and 90° tilt. Choose PoE (Power over Ethernet) or auxiliary power: 12–48V DC/24V AC. Additional features include 1024-zone motion detection and flexible privacy masking.

MegaDome® 2 with Wide Dynamic Range

Clear, sharp images and forensic zooming from live and recorded video are key benefits of MegaDome® 2 multi-megapixel WDR cameras. Remote Focus and Remote Zoom make MegaDome® 2 the easiest to install camera in our product line. These indoor/outdoor all-in-one solutions integrate a 1080p or 3 megapixel camera with the fastest frame rates in the industry and an IR corrected motorized varifocal lens (P-iris) into an IP66 environmental ratedIK-10 impact resistant dome housing. H.264 compression reduces network bandwidth and storage requirements while delivering full frame rates and full resolution without sacrificing image quality. Binning mode increases low light sensitivity. An easily adjustable 3-axis gimbal with 360° pan, 90° tilt and 360° z-axis further simplifies installation. Choose PoE (Power over Ethernet) or auxiliary power: 12–48V DC/24V AC. Additional features include 1024-zone motion detection and flexible privacy masking.

MegaBall™ with Wide Dynamic Range

The stylish MegaBall™ WDR multi-megapixel camera delivers high-resolution images to capture forensic details in recorded and live video. These indoor all-in-one solutions integrate a 1080p or 3-megapixel camera with the fastest frame rates in the industry and a choice of IR corrected 4mm fixed or 3.3–10mm varifocal lens with an adjustable wall mount or flush or surface mount dome housing. H.264 compression reduces bandwidth and storage requirements while delivering full frame rates and full resolution without sacrificing image quality. Binning mode for increased low light sensitivity is available at 3MP. Additional features include 1024-zone motion detection and flexible privacy masking. Choose PoE (Power over Ethernet) or auxiliary power: 12–48V DC/24V AC.

Compliant H.264 Compression

• Compliant implementation of H.264 allows full frame rates and full resolution without sacrificing image quality
• H.264 and MJPEG dual compression support with simultaneous streaming
• Decreases the CPU load both at the client (decompression) side and the server/storage side
• Lower bandwidth and storage relative to MJPEG
• BNR rate control to maintain desired bandwidth and storage size
• Real Time Streaming Protocol (RTSP) allows for compatibility with media players such as Apple QuickTime®, VLC and others

Advantages of WDR IP Cameras from Arecont Vision

SurroundVideo® Highlighted Features:
• All-in-One H.264 Day/Night
• Wide Dynamic Range of up to 100dB at full resolution
• 12-megapixel 180° field-of-view
• New smaller sensor-resistant and weather-resistant dome housing
• 1024-zone motion detection

MegaDome® Highlighted Features:
• All-in-One H.264 MegaDome® 2 Solution
• Wide Dynamic Range of up to 100dB at full resolution (AV2256PM/AV3256PM)
• Available in 1080p, 3MP sensor configurations with remote focus and remote zoom, day/night and auto-iris capabilities
• Integrated megapixel camera, lens and outdoor IP65/IK-10 dome housing
• Easily adjustable 3-axis camera gimbal with 360° pan, 90° tilt and 360° z-axis

MegaBall™ Highlighted Features:
• Wide Dynamic Range up to 100dB at full resolution
• Available in 1080p and 3-megapixel compact models
• Dual Encoder H.264 and MJPEG
• Simultaneous support of both H.264 and MJPEG

Compliant H.264 Compression

• Simultaneous support of both H.264 and MJPEG
• Binning mode for increased low light sensitivity is available at 3MP
• Lower bandwidth and storage relative to MJPEG
• BNR rate control to maintain desired bandwidth and storage size
• Real Time Streaming Protocol (RTSP) allows for compatibility with media players such as Apple QuickTime®, VLC and others

MegaDome® Highlighted Features:
• All-in-One H.264 solution with integrated lens, cable management and 3-axis adjustment
• Wide Dynamic Range up to 100dB at full resolution
• Color and Day/Night versions
• Wall mount bracket and dome configurations

MegaBall™ Highlighted Features:
• Wide Dynamic Range up to 100dB at full resolution
• All-in-One H.264 solution with integrated lens, cable management and 3-axis adjustment
• Available in 1080p and 3-megapixel compact models
• Dual Encoder H.264 and MJPEG
• Simultaneous support of both H.264 and MJPEG

See specific camera data sheets for all camera features