MegaVideo®

Arecont Vision
megapixel technology...
beyond imagination

Color, Day/Night, H.264 Megapixel Cameras

www.arecontvision.com

superior**image**quality

H.264

MORE EFFICIENT MEGAPIXEL IMAGING

- Full line of H.264 megapixel cameras ranging from 1.3 to 5 megapixels and maintaining real-time video frame rates
- H.264 (MPEG4 Part 10) compression standard
- Dual standard support: simultaneous streaming of H.264 and MJPEG
- Multi-streaming: up to 8 non-identical concurrent streams (different frame rate, bit rate, resolution, quality)
- Bit 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
- Unique proprietary implementation of compliant H.264 does not decrease full frame rates
- Precision motion detection capabilities

high**resolution**&**full motion**

Arecont Vision network cameras deliver full motion progressive scan 1600 x 1200 video at 24 fps featuring massively-parallel MegaVideo® image processing architecture capable of sustaining over 6 billion operations per second.

NO MOVING PARTS

Super high resolution MegaVideo® cameras allow up to four efficient zoom windows (Regions of Interest) to be instantly re-positioned across the entire field of view without any moving parts.

These Regions of Interest are delivered as separate video streams simultaneously with the full field of view video or virtual cameras, thus eliminating the trade-off between magnification and area coverage as well as avoiding costly and unreliable mechanical PTZ.

24-HOUR SURVEILLANCE WITH DAY/NIGHT FEATURE:

Single sensor Day/Night feature is especially useful where you need to capture images under highly variable lighting conditions - such as brilliant mid-day sun, and dim night. In daytime illumination, the camera operates in normal color mode providing vivid images, then automatically changes to black and white mode using IR cut filter removal technology when the light fades at dusk. The transition from day to night is fully programmable, or forceable to either day or night mode.

reducedsystemcost

REDUCED COST OF INSTALLATION

For example, AV5100M (5 megapixel camera) can replace up to 15 analog cameras. When you reduce the number of cameras, you also reduce on software licenses, enclosures, camera mounts, wiring, and lenses.

NO EXTERNAL POWER / REDUCED WIRING

Cameras are powered via POE (Power Over Ethernet) 802.3AF "Switch" - no need to run separate power.

IMPRESSIVE FORENSIC ZOOMING

The Arecont Vision surveillance system has the ability to zoom after the event from high resolution digital archives, while providing simultaneous viewing of zoomed in and full field images.

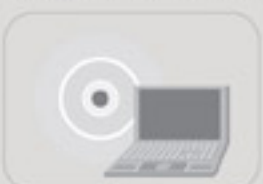
MULTIPLE REGIONS OF INTEREST

MegaVideo® technology enables simultaneous delivery of multiple Regions of Interest in full frame rate over separate video streams.

easysystemsintegration

Power over Ethernet
Power for the camera is drawn from the network, reducing cabling requirements and installation time.

Local Area Network
Real-time viewing, archive storage and playback.



Internet
Real-time viewing/playback with selectable resolution.

Easy Installation
Arecont Vision cameras are connected like any other device on a network

Bandwidth Optimization
User-selected viewing resolution allows video stream to be viewed over minimal bandwidth. If an alert situation occurs, image can be switched to high resolution mode

User Interface
Onboard interface is provided for control of Region-of-Interest, image cropping, motion detection, and user access

daynightmegavideo

AV3130M

DAYNIGHT

MegaVideo® Technology Delivers Full Motion HDTV Resolution at NTSC Price

AV3130M series network camera is a unique dual sensor Day/Night camera solution that delivers the functionality required for applications with changing lighting conditions. This full motion progressive scan camera delivers up to 15fps in color (3MP) mode and 30fps in B&W (1.3MP) mode. Using massively-parallel MegaVideo® image processing architecture, AV3130M is capable of sustaining over 6 billion operations per second with unparalleled resolution performance and value. It is also possible to stream the field of view at a lower resolution while streaming regions of interest at full megapixel density. With support for compliant Power-over-Ethernet (POE) functionality and multi-megapixel resolution, these cameras are priced comparably to analog and IP VGA cameras.

EXTREMELY WIDE ILLUMINATION RANGE
100,000 lux down to 0.01 lux

DAY SENSOR (3M)
IR Cut filter for vibrant daytime colors

NIGHT SENSOR (1.3M)
Sensitive to low light and IR

AUTO-SWITCH DAY TO NIGHT
No mechanical moving parts

SUPERB ILLUMINATION RANGE & SENSITIVITY
While sophisticated conventional cameras improve low-light sensitivity by mechanically removing the IR filter, the **AV3130M uses DualBand™ technology**, which seamlessly switches to an optimized monochrome sensor in low light. This eliminates sensitivity drop-off due to color filters and small pixels while accommodating 10,000,000:1 range of scene illuminations, from bright sunlight to cloudy moonlight.

efficientbandwidthmanagement

Non Arecont Vision camera must deliver the full field of view

12 ips @ 200K = 19.2 Mbps*

Competition utilizes 315% more bandwidth compared to Arecont Vision

2ips (1920x1080 resolution)

Efficient bandwidth utilization is supported via user selected Regions of Interest. The reduction of overall storage and bandwidth requirements may be achieved by selecting up to 4 regions of interest with independent control of resolution and compression quality for each of the selected regions.

Each Region of Interest can be streamed at varying frame rates if desired.

Full FOV	2 ips	@ 200K	= 3200 Kbps**
Lane 1	12 ips	@ 10K	= 960 Kbps
Lane 2	12 ips	@ 10K	= 960 Kbps
Lane 3	12 ips	@ 10K	= 960 Kbps
	38 ips		= 6.00 Mbps Total

Arecont Vision saves approximately 315% bandwidth compared to competition using Region of Interest streaming. Full field of view and all three regions are streamed simultaneously.

** Example using MJPEG compression without Region of Interest.*

*** Example using MJPEG compression with Region of Interest.*

NOTE: H.264 compression would result in a calculated efficiency of ten times on average.

1.3MP IP-camera

Minimum Illumination
- Color: sensitive to 0.1 lux @ F 1.4
- D/N: 0 Lux, IR sensitive

Frame rate 32 fps @ resolution 1280(H) x 1024(V)

The AV1300M offers the same frame rate as NTSC/PAL and real time high definition digital video surveillance with 4 times the resolution of the best analog surveillance cameras

Optional: 1.3MP Day/Night camera with automatic IR cut filter

Megapixel Technology at an Analog Camera Price!

2MP IP-camera

Minimum Illumination
- Color: sensitive to 0.1 lux @ F 1.4
- D/N: 0 Lux, IR sensitive

Frame rate 24 fps @ resolution 1600(H) x 1200(V)

The AV2100M offers cinema compatible high frame rates to allow real time high definition digital video surveillance with 6 times the resolution of the best analog surveillance cameras

Optional: 2MP Day/Night camera with automatic IR cut filter

Most Versatile Camera

3MP IP-camera

Minimum Illumination
- Color: sensitive to 0.2 lux @ F 1.4
- D/N: 0 Lux, IR Sensitive

Frame rate 15 fps @ resolution 2048(H) x 1536(V)

The AV3100M offers high frame rates to allow real time high definition digital video surveillance with 10 times the resolution of the best analog surveillance cameras

Optional: 3MP Day/Night camera with automatic IR cut filter

Replaces up to 10 Analog Cameras

5MP IP-camera

Minimum Illumination
- Color: sensitive to 0.3 lux @ F 1.4
- D/N: 0 Lux, IR Sensitive

Frame rate 9 fps @ resolution 2592(H) x 1944(V)

The AV5100M offers high frame rates to allow real time high definition digital video surveillance with 15 times the resolution of the best analog surveillance cameras

Optional: 5MP Day/Night camera with automatic IR cut filter

Super High Resolution

3MP / 1.3MP IP-camera

Minimum Illumination
- Color: 0.2 Lux @ F1.4
- B/W: 0 Lux, IR sensitive

Frame rate up to 15 fps @ 2048(H) x 1536(V) - 3MP color
30 fps @ 1280(H) x 1024(V) - 1.3 MP monochrome

Multi-sensor DayNight™ AV3130M leverages proprietary patent-pending technology and alleviates the cost and sensitivity shortcomings associated with multi-megapixel video surveillance.

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All Models Listed are Made in USA

AV1300M / AV1300DN / AV1300-AI
AV1305 / AV1305DN / AV1305-AI

1.3 megapixel CMOS image sensor
1280(H) x 1024(V) pixel array
½" optical format
Minimum Illumination
Color: sensitive to 0.1 Lux @ F 1.4
D/N: 0 Lux, IR sensitive
Frame rate up to 32 fps @ 1280 x 1024

AV2100M / AV2100DN / AV2100-AI
AV2105 / AV2105DN / AV2105-AI

2 megapixel CMOS image sensor
1600(H) x 1200(V) pixel array
½" optical format
Minimum Illumination
Color: sensitive to 0.1 Lux @ F 1.4
D/N: 0 Lux, IR sensitive
Frame rate up to 24 fps @ 1600 x 1200

AV3100M / AV3100DN / AV3100-AI
AV3105 / AV3105DN / AV3105-AI

3 megapixel CMOS image sensor
2048(H) x 1536(V) pixel array
½" optical format
Minimum Illumination
Color: sensitive to 0.2 Lux @ F 1.4
D/N: 0 Lux, IR sensitive
Frame rate up to 15 fps @ 2048 x 1536

AV5100M / AV5100DN / AV5100-AI
AV5105 / AV5105DN / AV5105-AI

5 megapixel CMOS image sensor
2592(H) x 1944(V) pixel array
½.5" optical format
Minimum Illumination
Color: sensitive to 0.3 Lux @ F 1.4
D/N: 0 Lux, IR sensitive
Frame rate up to 9 fps @ 2592 x 1944

AV3130M

½" CMOS image sensors:
3 MP color 2048(H) x 1536(V)
1.3 MP monochrome 1280(H) x 1024(V)
Minimum Illumination
Color: 0.2 Lux @ F1.4
B/W: 0 Lux, IR sensitive
Frame Rate up to 15 fps @ 2048 x 1536
30 fps @ 1280 x 1024

Data Transmission

H.264/MJPEG with 21 levels of quality
100Base-T Ethernet Network Interface

Programmability

Auto Exposure (AE) and Gain Control (AGC) 120dB
Auto backlight compensation
On-camera motion detection with 64 detection zones
Auto multi-matrix white balance
Electronic Pan, Tilt, Zoom (PTZ)
Electronic image rotation upside-down image turn
Programmable motion blurring control for low-light mode
MoonLight™ mode – extreme low light
Pictures-in-picture: simultaneous delivery

Electrical

Opto-coupled alarm input/output w/flash sync output
Power over Ethernet (PoE) or DC input
PoE 802.3af / auxiliary 15V - 48V DC
Power : 3 Watts maximum (AV3130 - 3.2W)-JPEG versions
Power : 4 Watts maximum - H.264 versions

Regulatory Approvals

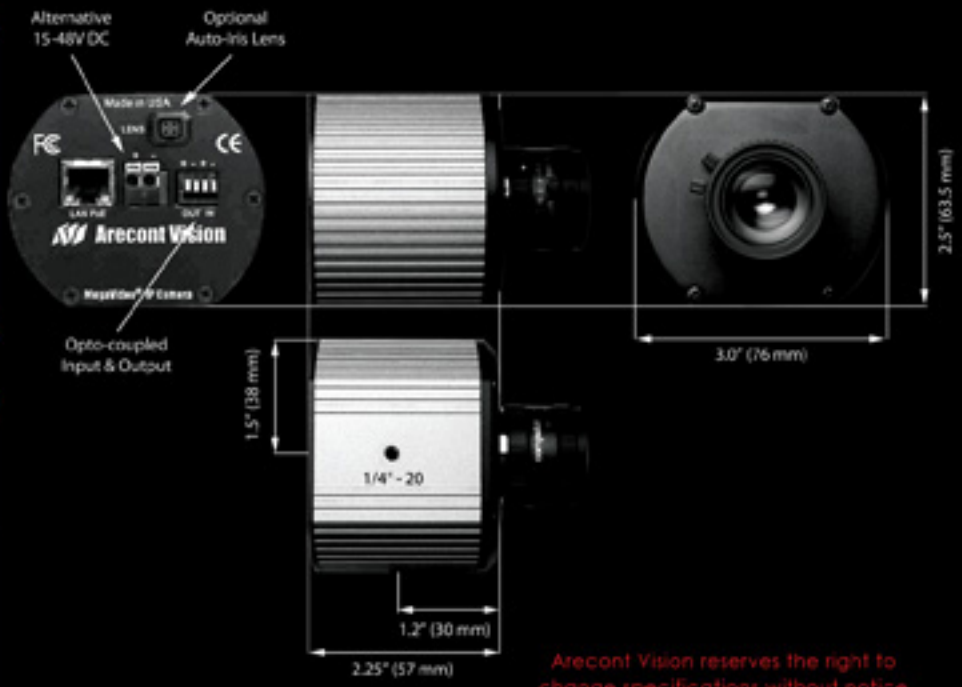
FCC Part 15, Class B
CE compliant

Mechanical

3"W (76mm) x 2.5"H (63.5mm) x 2.25"D (57mm) (w/o lens)
8.6 oz or 243 grams (w/o lens)
C/CS lens mount

Environmental

Operating temperature 0°C (32°F) to +50°C (122°F)
Storage temperature -20°C (-4°F) to +60°C (140°F)
Humidity 0% to 90% (non-condensing)



Arecont Vision reserves the right to change specifications without notice

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