

February 2018 Customer Webinar



Leading the Way in Megapixel Video™

Company Update



Leading the Way in Megapixel Video™

The Arecont Vision 1st Quarter 2018 Promotion



Promotional Pricing from January 15, 2018 through March 31, 2018
Arecont Vision announces the 1st Quarter 2018 Promotion. This limited-time incentive program offers special pricing on select Arecont Vision products throughout the sales quarter.

Available Models:

SurroundVideo® BMP Cameras

Part Number
AV1818DN
AV1818DN-VIS

SurroundVideo® 12MP Cameras

Part Number
AV1218DN

SurroundVideo® Omni 12MP Cameras

Part Number
AV12176DN-NL
AV12176DN-28
AV12176DN-36

SurroundVideo® Omni 20MP Cameras

Part Number
AV20175DN-NL
AV20175DN-28
AV20175DN-36

MicroBullet® 1080p Cameras

Part Number
AV2325CNIR

MicroBullet® 1080p WDR Cameras

Part Number
AV2326CNIR

MicroBullet® 3MP Cameras

Part Number
AV3325CNIR

MicroBullet® 3MP WDR Cameras

Part Number
AV3326CNIR

How the Instant Discount Works:

1. Distributor sends POs to Arecont Vision for the products listed above, while supplies last.
2. The PO must state "1st Quarter 2018 Promotion".
3. The distributor should list the appropriate Q1 Promo discount on the PO. Call your Arecont Vision Regional Sales Manager or Inside Sales Manager pricing details.
4. POs should be received between 1/15/18 - 3/31/18.
5. POs received after 3/31/18 will be at normal discount levels (21-33) or registration pricing.
6. No ship and debit, cost deviation, or other crediting process will be accepted. All discounts must be applied upon submission of the purchase order.



Leading the Way in Megapixel Video™

Made in the USA* www.arecontvision.com | +1.818.937.0700
*Except MicroBullet

• New 1st Quarter 2018 Promotion

- ~50% off **SurroundVideo®** Panoramic G1
- ~50% off **SurroundVideo®** Omni G1
- ~30% off **MicroBullet®**

• Project registration not required

• Contact Inside Sales for full details

- sales@arecontvision.com
- +1.818.937.0700 Option 3

• View online

- <https://www.arecontvision.com/landing-pages/promos/overview.php>

Arecont Vision 30-day Try and Buy Program



- Try one of our newest cameras, for 30 days. If not completely satisfied, return for a full refund

Extended by Popular Demand!

Due to popular demand, the TRY & BUY Program is extended through **March 31, 2018**. The TRY & BUY Program allows an integrator to install any of the MegaDome® 4K, MegaVideo® Flex, SurroundVideo® G5, SurroundVideo® Omni G2 or G3 cameras in a customer environment at no risk, and at special introductory pricing. Arecont Vision® is so confident that customers will want to keep the camera that if the customer is not completely satisfied, the camera can be returned for a **full refund**!

The Arecont Vision® Trade Up Promotion



Trade Up previously installed professional megapixel cameras from Arecont Vision or competitive vendors* such as Avigilon, Axis, Bosch, Hanwha Samsung, Hikvision, Pelco, Sony, and more to earn big rebates!

- Qualifying box cameras earn a **\$50 rebate**** for a new MegaVideo® purchase
- Qualifying bullet cameras earn a **\$100 rebate**** for a new MegaView® purchase
- Qualifying dome cameras earn a **\$100 rebate**** for a new MegaDome® purchase
- Qualifying PTZs and multi-sensor cameras earn a **\$300 rebate**** for a new SurroundVideo® purchase

- Trade in previously-installed Arecont Vision or qualifying competitor megapixel cameras toward new Arecont Vision models

<https://www.arecontvision.com/landing-pages/promos/overview.php>

Innovation: Most Complete Megapixel Product Line



Leading the Way in Megapixel Video™



Omni

Omni G2

Omni G3

SurroundVideo®Omni
G1 – G2 – G3 Series



180° Mini

180° w/RF

360° Mini

SurroundVideo® G5 Series



MicroDome® Duo



Surface IR

Surface

Flush

MicroDome® G2



MicroBullet®



MegaVideo® Flex



Bell Mount

Bell Mount IR

Wall/Surface Mount

MegaBall® G2



MegaDome® 4K



G3 RS

G3

G3 with IR

MegaDome® G3 Series



Telephoto

Wide Angle

MegaView® 2



MegaVideo® 4K



Dual Sensor

Single Sensor w/RFZ

MegaVideo® G5 Series

- 2 new AV products announced at Intersec Dubai on January 21st



MegaDome® UltraHD



AV NVR™

12MP / 4K (8.3 MP) / 1080p All-in-One H.264 Remote Focus/Zoom, P-Iris Lens, True Day/Night, Indoor/Outdoor Dome IP Camera

Highlighted Features Include:

- Tri-Mode offers choice of 12MP @ 20 fps, 4K (8.3MP @ 30fps), or 1080p @ 60 fps
- Ultra high resolution image quality
- H.264 true day/night indoor/outdoor dome IP cameras
- **SNAP**stream™ (*Smart Noise Adaptation and Processing*) technology for reduced bandwidth without impacting image quality
- **NightView**™ technology for enhanced low light performance
- WDR (*Wide Dynamic Range*)
- Installer-friendly housing
- Integrated IR LED illuminator

Pre-order today... coming soon!



<https://www.arecontvision.com/products/MegaDome+UltraHD+Series>



SNAPstream™



4K Resolution



Integrated Motorized
Lens with Remote
Focus and Zoom



P-Iris Control for
Best Depth of Field
and Image Clarity



True Day/Night
with IR Cut Filter



CorridorView™
with 90° Image Flip



IR LEDs



SDHC Card Slot



Impact / Weather Resistant
IK-10 and IP66 Rated



All-in-One PoE
and Integrated Lens



Megapixel IP Cameras

8 or 16 Channel PoE Network Video Recorder for small to medium sized projects

Highlighted Features Include:

- All-in-One platform with NVR for video recording/playback, integrated PoE switch, software, & camera licenses
- Ideal for small (AV-800 8 channel) or small to medium (AV-1600 16 channel) size installations
 - 1 channel = 1 megapixel camera sensor
- Power status utility
- Instant playback feature
- Mobile app for remote viewing & playback
- Supports Arecont Vision-brand single & multi-sensor megapixel cameras or ONVIF S compliant cameras
- Available with or without hard disk drives, supporting up to 12TB in 2 SATA storage bays
 - *WD Purple Surveillance Hard Drives in with-drive configurations*



Available now!



- H.264, H.265, MPEG4, & MJPEG compression & SNAPstream™ (Smart Noise Adaptation & Processing) technology support
- Smart Plug-and-Play makes camera setup & configuration easy with Auto Discover & Auto Configuration



- Select the Arecont Vision-brand cameras of your choice to meet small to medium sized project requirements

- **AV-800 8 channel**

- Up to 10MP resolution recording per sensor, including 4K single & 40MP multi-sensor cameras

- **AV-1600 16 channel**

- Up to 5MP resolution recording per sensor, not including 4K resolution & 40MP multi-sensor cameras

- 1 channel = 1 megapixel camera sensor

<https://www.arecontvision.com/products/AV+NVR+Series>

- **AV-800** with (4) MicroDome® 5MP Single Sensor Cameras [= 4 Channels] + (1) SurroundVideo® 12MP Panoramic [= 4 Channels] = 8 Channels



- **AV-800** with (6) MegaDome® 3MP Single Sensor Cameras [= 6 Channels] + (2) MegaView® 2 5MP Single Sensor [= 2 Channels] = 8 Channels



- **AV-1600** with (4) MicroDome® 5MP Single Sensor Cameras [= 4 Channels] + (3) SurroundVideo® Omni 12MP [= 12 Channels] = 16 Channels



- **AV-1600** with (8) MegaDome® 2 3MP Single Sensor Cameras [= 8 Channels] + (8) MegaView® 2 5MP Single Sensor Cameras [8 Channels] = 16 Channels



• March Events

- **Converged Security Summit**
 - March 1 **Atlanta, GA**
- **The Great Conversation in Security**
 - March 5, 6 **Seattle, WA**
- **PSA Tec**
 - March 12-16 **Denver, CO**

• April Events

- **ISC West**
 - April 11 – 14 **Las Vegas, NV**
- **Expo Seguridad**
 - April 24 – 26 **Mexico City**
- **RILA Asset Protection Conference**
 - April 29 – May 2 **Kissimmee, FL**
- **IAPSC Annual Conference**
 - April 29 – May 1 **San Diego, CA**



AV Event Schedule:

<https://www.arecontvision.com/tradeshows.php>



Focus on Large Enterprise



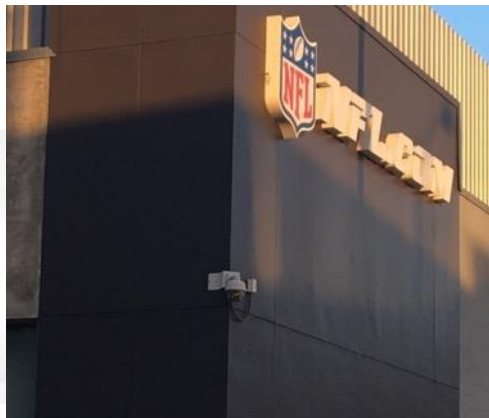
- **Arecont Vision-brand cameras increases overall ROI for enterprises while improving situational awareness**
 - Single- and multi-sensor megapixel cameras reduce infrastructure costs
 - Single sensor megapixel cameras over superior image quality to analog, covering larger areas with more pixels
 - Multi-sensor cameras reduce cabling requirements, complexity, and cost, while slashing software licensing fees 4 to 1
 - Continuous coverage of entire scene provides superior coverage to PTZs

- **Arecont Vision advanced technologies can dramatically reduce infrastructure expenditures for large enterprises**
 - Low light and WDR technologies for challenging lighting conditions, with or without external lighting
 - Remote focus, remote zoom, & remote setup reduce installation time, cost, & liability risk
 - Advanced installer-friendly designs speed installation & setup

Learn more: <https://www.arecontvision.com/landing-pages/industry-leading-technology/overview.php>

- **Arecont Vision-brand cameras offer unique advantages for ROI & security that are important to enterprises**
 - The Massively Parallel Image Processing (MPIP) architecture leverages the power of the Field Programmable Gate Array (FPGA) IC @ the core of every AV camera
 - This allows new or updated features to be applied to deployed AV cameras, extending their useful life for enhanced ROI
 - Example: **SNAP**stream™ update
 - AV cameras cannot be repurposed for use in cyberattacks on the network or other devices
 - Example: AV cameras have never been reported as being used in ANY cyberattack

Learn more: <https://www.arecontvision.com/whitepapers/>



<https://www.arecontvision.com/solutionview/Large+Enterprise>

HOW I SHOT THE BEAR: SAFARICOM STORES



- Safaricom is the largest cellular service provider in Kenya
- Kenyan infrastructure heavily reliant on road transport – particularly important for cellular providers to provide continuous connectivity on its densely populated road infrastructure.
- Major City's include Nairobi, Mombasa, Kisumu, Naikuru, Eldoret, Kitale and Lam
- Safaricom claim to fame:
- Vodacom SA 35% stake in Safaricom
- MPESA mobile money transfer service payment via phone as shown in Bloomberg and CNN



- Safaricom emphasis on security particularly in it stores
- Significant and rapidly growing infrastructure with stores being built all across the country
- Stores have significant stock levels and high value items
- Front facing that require client safety and protection of assets



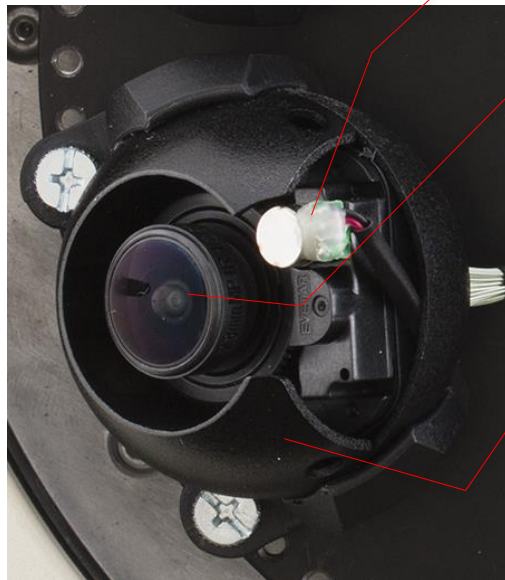
The Challenges experienced by the client:

1. Potential theft in store
2. Monitoring of staff and site remotely
3. Remote locations
4. Flexibility to view all angles of the store without being on site

- Systems Integrator Amiran Communications, long standing partner that implemented branches across Kenya with presence in 8 countries and Head office based in the UK
- Milestone Corporate Head End to ensure flexibility and open platform expansion
- Reduction of camera count with the use of multi-sensor technology
- With our SNAPstream™ technology we are able to stream the multi-sensor camera and reduce the recording significantly with very little impact on the existing mobile infrastructure



Omni Camera – the flexible solution



Motorized
Focus Module

Changeable
Lens
2.1mm to 16mm

3 Axis Gimbal

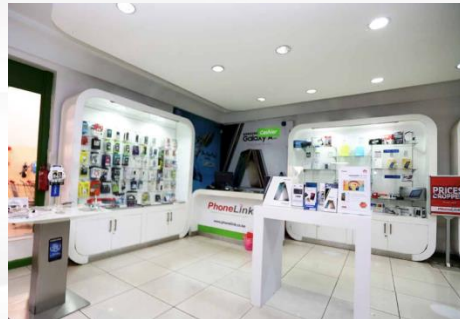


SNAPstream™ Technology

(Smart Noise Adaptation and Processing)

Highlights:

- Greatly Reduces Bandwidth
- Adapts to Sudden Changes in the Scene
- Lower Storage Requirements





- Interchangeable Lenses giving client flexibility to view wider angles or more pertinent points
- 360 Degree and 180 Degree form Factors including AV20565DN and AV20585DN
- Our award winning Microdome Duo reducing footprint even further

- The flexibility of Generations has given the client more options and price points on the Omni Gen 1, Gen 2 and Gen 3 with the same technology and quality that the product promises
- The Cut Filter for low light conditions Black and White has performed exceptionally well and has provided good low light scenes
- The build quality and design and longevity have given Safaricom significant ROI
- Client feedback has been extremely positive – ‘unique and ahead of its time’



SurroundVideo® Omni G1



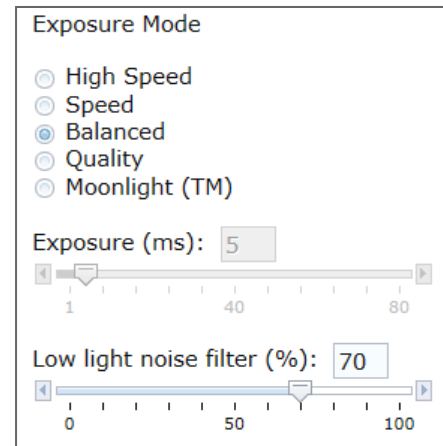
SurroundVideo® Omni G2



SurroundVideo® Omni G3

Understanding Exposure on Arecont Vision Cameras

- Arecont Vision cameras use CMOS sensors and our own automatic exposure control electronically within the CMOS chip to achieve the proper exposure
- A number of manually selectable settings found on other brand cameras have been grouped into selectable preset modes
 - Exposure and gain control
 - Backlight compensation
- These functions automatically adjust their levels at rates determined by the mode selected



Modes are selected in the camera image settings as “Low Light Mode” in our older cameras

- Five modes available to select from
 - MoonLight™
 - Quality
 - Balanced
 - Speed
 - High Speed
- In all of these modes except the High Speed mode, the on-camera Auto Exposure control goes through several discrete stages of adjusting exposure time and gain, typically increasing the exposure time to a certain intermediate point first, followed by an increase in gain
 - 60Hz at 8.3ms increments
 - 50Hz at 10ms increments

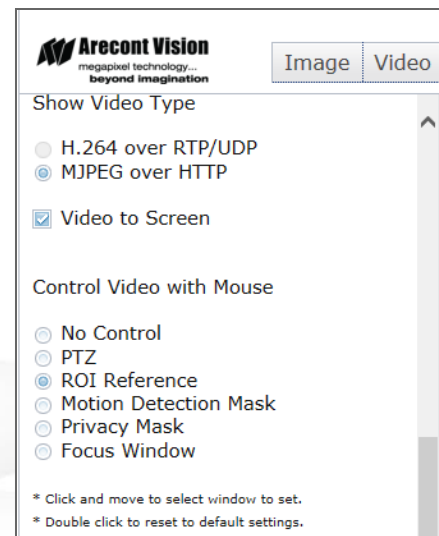
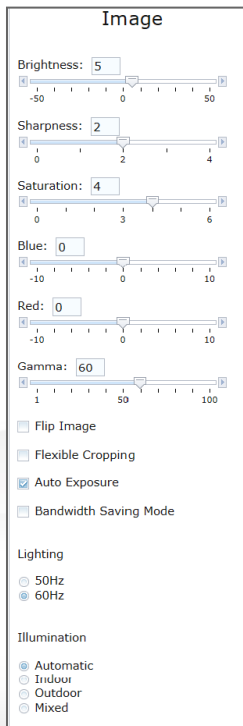
There are different trade-offs for each mode, between higher image noise and bit rates with shorter exposures, reduced FPS and motion blur with longer exposure times

- How does Auto Exposure work?
 - The user sets the desired brightness of the image (target brightness)
 - An on-camera Auto Exposure control continuously measures the actual brightness of the image, typically in the center of the image frame, and adjusts the exposure time (shutter speed) and/or the gain to arrive at the target brightness
 - Depending on the selected exposure mode (one of five Low Light Modes), the on-camera Auto Exposure control will arrive at the target brightness with a different trade-off between the produced motion blur and the noise level in the image
- Backlight compensation is achieved by setting a custom exposure measurement window centered and sized according to the position of the underexposed objects on a brightly lit background

(Region Of Interest as exposure reference)

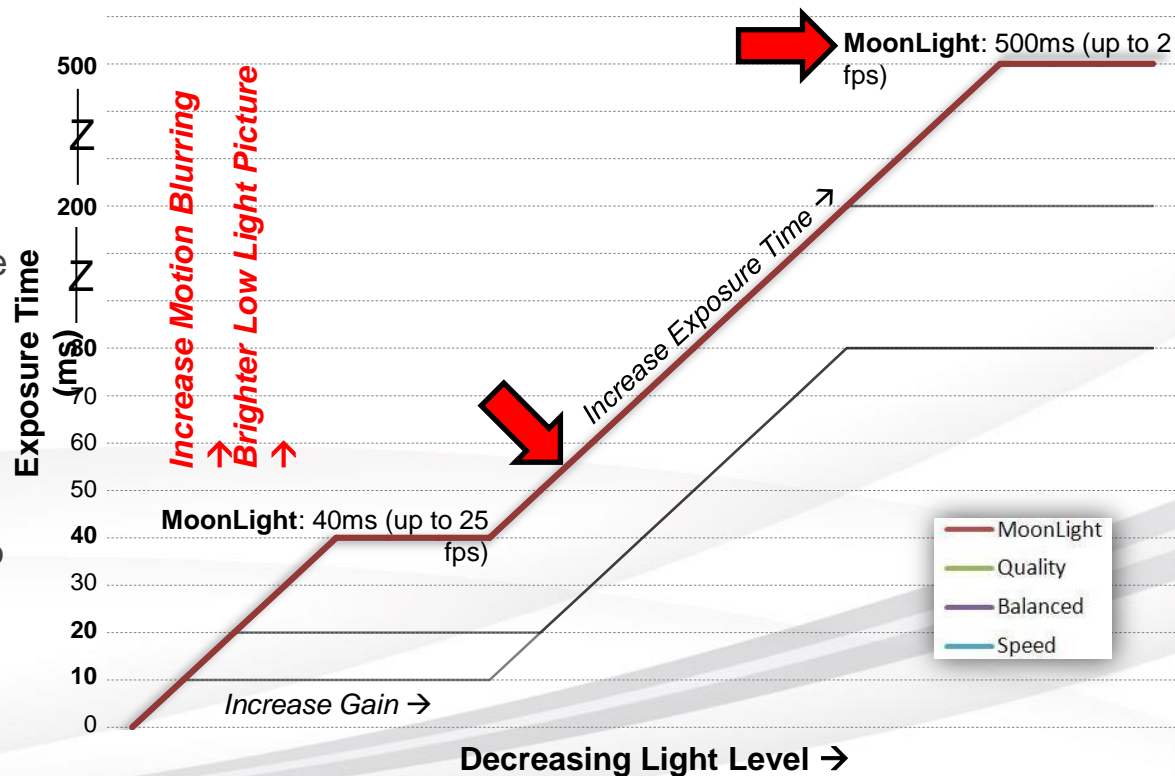
Other settings that affect exposure

- Image Brightness
- Exposure Reference



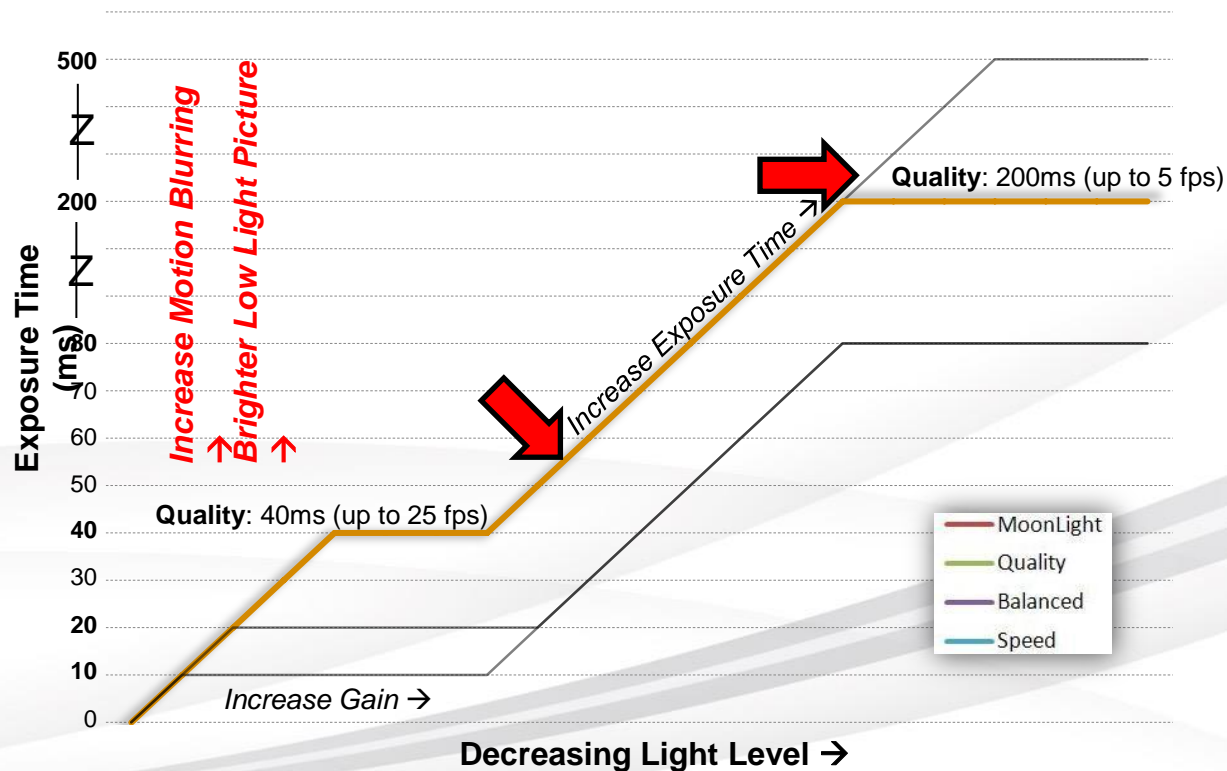
MoonLight™ Mode:

- This mode will produce the best image quality under very low light conditions with the least amount of image noise
- The trade-off is in favor of low noise at the expense of high motion blur
- There are two stages of exposure control:
 - First stage is limited to 40 ms exposure time with gain limited to 5
 - Followed by a second stage (if the target brightness was not reached) with up to 500 ms exposure while maintaining gain as low as possible



Quality Mode:

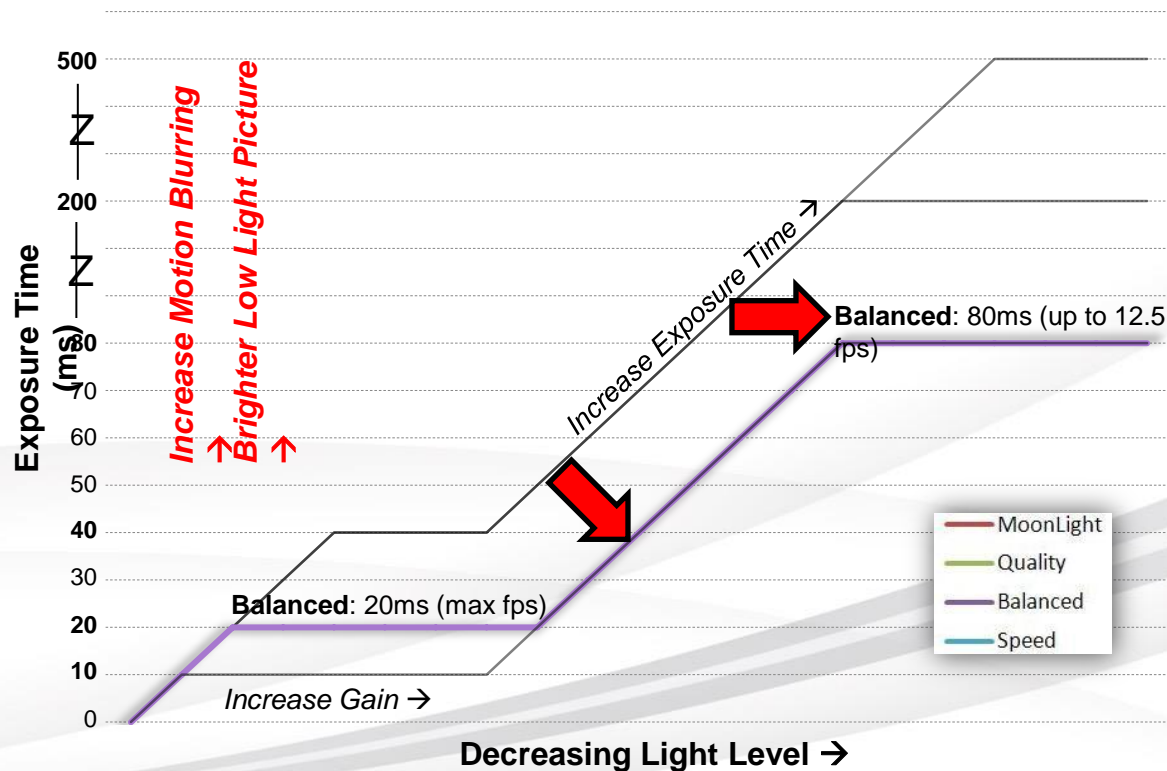
- This mode is similar to MoonLight mode except for a shorter exposure time
 - First stage is up to 40 ms exposure with the gain limited to 5
 - Second stage is up to 200 ms exposure while keeping the gain as low as possible
- This mode is a good compromise between reducing noise and motion blur under most lighting conditions, but with an increase in motion blur under low light conditions



Balanced Mode

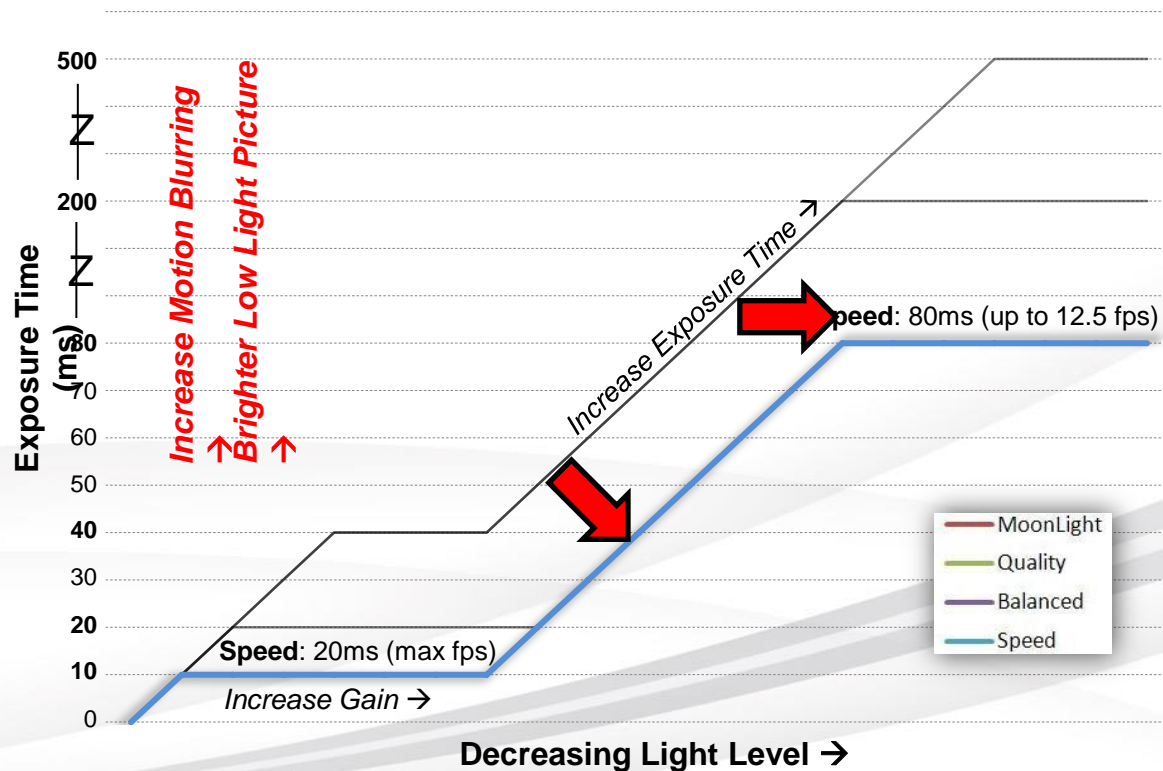
Balanced Mode:

- Similar to the Quality setting except the
 - First stage is limited to 20ms with gain allowed to go up to 20
 - Followed by the second stage with exposure time up to 80ms
- This is the default setting for Arecont Vision cameras and will provide the best exposure settings balance for typical installations assuming good lighting conditions
- Exposure times and motion blur will increase in low light but not as much as with Quality or Moonlight modes



Speed Mode:

- In this mode, the
 - First stage of exposure control limits exposure time to 10ms while allowing gain to go up to 20
 - Second stage is up to 80 ms exposure time while maintaining gain as low as possible
- In the second stage the speed mode will behave the same as balanced mode

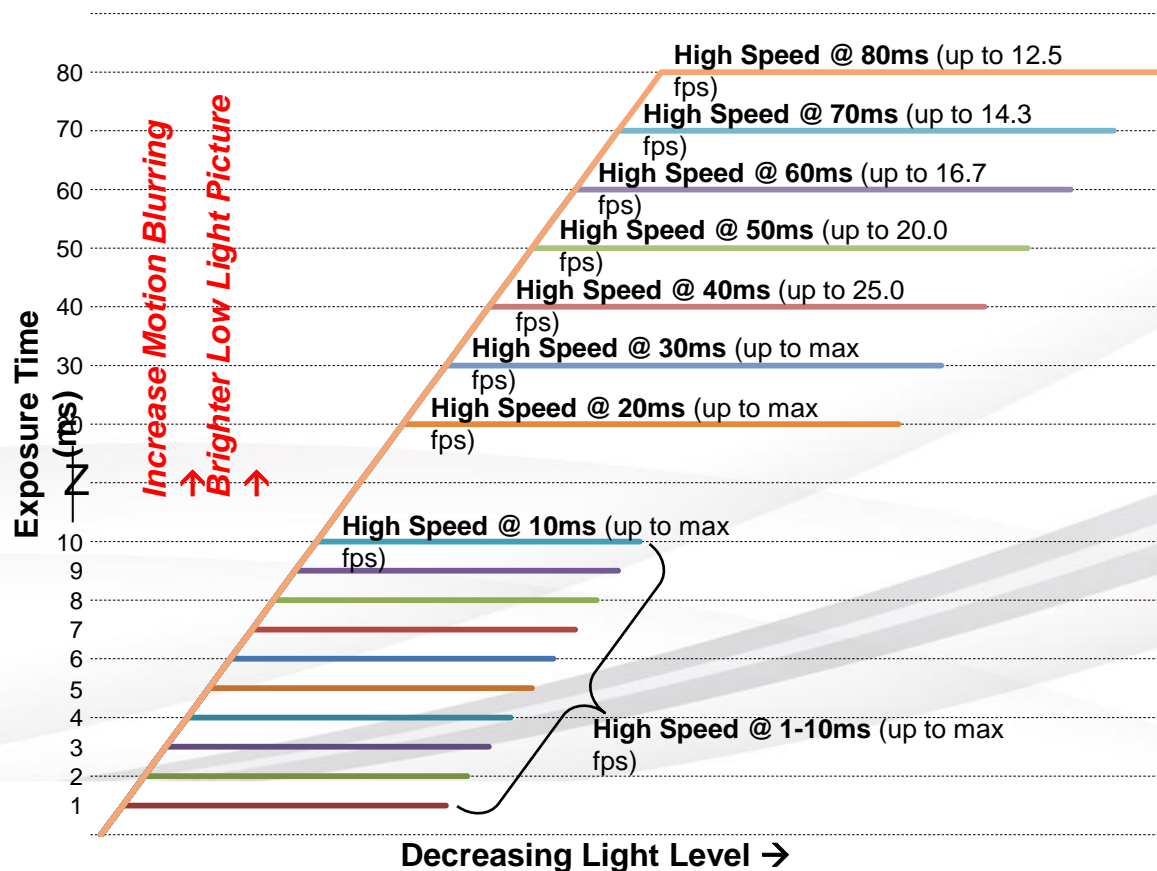


High Speed Mode

High Speed Mode:

- This mode enables the shortest exposures between 1 and 80ms
- Shorter exposures reduce motion blur for applications such as monitoring fast moving objects and reading license plates
- The trade-off is an increased level of noise

Exposure time and shutter speed are the same thing, 1 millisecond (ms) is the same as 1/1000 shutter speed



- Decreased exposure reduces motion blur but darkens the image in low light
 - To maintain the same brightness, the gain must be increased which will be done by the camera automatically
 - As gain increases, image noise increases, for that reason short exposure images look grainy
- Increased exposure time causes the AGC to reduce gain which reduces the amount of noise but increases motion blur on fast moving objects
- Opening the iris all the way enhances low light performance but decreases the depth of field causing objects in the fore and background to go out of focus
- With exception of “Casino“ mode FPS shown in AV camera specifications are maximum possible, actual frame rate output by the will be affected by low light mode selected, lens / f-stop, network infrastructure, and local illumination



Leading the Way in Megapixel Video™

www.arecontvision.comsales@arecontvision.com

+1.818.938.0700



NEWS BLOG

<http://blog.arecontvision.com>

News Center

Get the latest scoop on Arecont Vision™ with press releases, conference and event dates, videos, and more.

<https://www.arecontvision.com/news.php>

Connect with us

linkedin.com/company/arecont-visionfacebook.com/arecontvisionyoutube.com/user/ArecontVisiontwitter.com/arecontvision[@arecontvision](https://twitter.com/arecontvision)