# **Arecont Vision November 2015 Update**

**26 November 2015** 





- Excitement and high traffic at ASIS and international shows!
- New people on-board in sales, engineering, and services
- New products are ready for delivery!
- Excellent Progress with VMS/NVR Partner integration, events, customer project training and execution
- Project Registration is providing substantial separation between standard and registered pricing. This gives SI/dealers the best chance to win with Arecont Vision!
- Quality and Service continue strong improvement and the results show it.
- Situational Awareness Plus will help drive improved understanding, better designs and terrific solutions.



- ASIS 2015 was held 9/28-30 just 35 miles/56 km from our HQ in Glendale
  - While show attendance seemed light overall, our booth remained busy due to pre-scheduled meetings
    - Regional sales teams, reps, strategic accounts team, and the technology partner program all contributed with meetings in the booth
  - 15 press meetings, 2 video interviews for Scott, 1 for video interview for Brad, and 2 press visits to HQ
  - Multiple customer visits to HQ the next day









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#### New Product of the Year Award













Security Sales & Integration 2015 Stellar Service Award 2014 Top 30 Technology Innovators



PSA Security Network Super Star Vendor Achievement Award – 2014, Outstanding Vendor – 2012, 2013, and 2015



ADI 2013 Vendor of the Year 2012 New Vendor of the Year



Detektor International Awards Best CCTV Product of 2014 Award



Milestone Systems Camera Manufacturer Partner of the Year – 2011 and 2014



Security Products Govies (3) Platinum, (2) Gold, 2012 - 2015



China Public Security Expo Golden Cauldron, 2011 and 2013



Security Industry Association Chairman's Award – Scott Schafer - 2015



Physical Security and Video Surveillance Industry Influencers Security.World | Scott Schafer - 2015

## Our Newest Award-Winning Product





### What Our Customers Say Campaign

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Learn more: http://www.arecontvision.com/Company/what-our-customers-say

## **Recent Customer Meetings**



- End Users activity is high
  - · Government, Distribution Centers, Hospitality, Banks and others using single sensor and 180/270/360 degree Panoramics with much success and satisfaction
  - Excited about new remote focus features
  - Reduction in cameras is a big win.
  - Megapixel cameras provide the best ROI
- · Architects & Engineers and Consultants are doing much more design work with Arecont Vision
  - Impressed with Arecont Vision training on megapixel basics and advances.
  - · Pixel density presentations are a winner!
  - · Leading technology
  - Unique designs, especially OMNI, panoramics and MicroDomes
  - High Performance
  - Great solution for their customer
  - · Remote focus is a winner!
- Systems Integrators are working more closely with Arecont Vision
  - · Positioning Arecont Vision as the key component of a differentiated solution for their customers and prospects
  - · Training sales people, designers, and installation engineers in classes and on-line
  - Demonstrations on their own and with Arecont Vision field personnel
  - · Job walks, detailed designs with Arecont Vision Field Application Engineers
  - · Project Registration is a great way to gain margin and protect their deals
  - Remote focus will help them at installation and improves on-going support.
- Distributors are leading with Arecont Vision
  - · Distributors driving more intensity because of unique solutions they can build and they get better project protection
  - · Distributors and their SI/dealers make more money with Arecont Vision
  - SI/Dealers requesting Arecont Vision products more than ever before!



- Programs for end-of-year will be announced in the next weeks.
- New support programs in place will drive better service for our customers.
- SI/dealers should sign up for service parts/demo agreements. That way we can ship immediately and we will not require a credit card. It is fast and simple to do.
- Many new products are shipping now!



## **SituationalPLUS+** by Arecont Vision<sup>®</sup> Re-defining Situational Awareness for Video Surveillance







• Megapixel video surveillance cameras have the ability to capture enough details for irrefutable evidence when the proper calculations are performed.



- Megapixel Value Proposition:
  - Leverage increased resolution to increase details and reduce cameras in surveillance designs.
  - This is determined by:
    - Resolution of the camera sensor
    - · Field of view covered by the camera lens







# **Horizontal Pixels**

(Camera resolution)

# Pixel Density =

(Clarity of the image)

# **Horizontal Field of View**

(Left to right field of view)



Detection, Classification, Recognition, Identification (DCRI)



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 Developed by John Johnson of the U.S. Army Night Vision lab to help define required image quality for surveillance applications.





- SituationalPLUS+ is a simplified concept of Detection, Classification, Recognition, Identification (DCRI).
- "*The sweet spot*" is where camera resolution and chosen optic provide sufficient resolution that most people can recognize a face or identify details of a license plate.





• 45° FOV:





• 90° FOV:





#### • 1080p MicroDome example:

Camera	Lens	SituationalPLUS+ (60ppf / 196ppm)	10 m (33ft)	20 m (66ft)	40 m (131ft)	100 m (328ft)	150 m (492ft)
AV2455DN-F/S	MPM2.8	3 meters (10ft)	No	No	No	No	No
AV2455DN-F/S	MPM4.0	5.5 meters (18ft)	No	No	No	No	No
AV2455DN-F/S	MPM6.0	9.5 meters (31ft)	No	No	No	No	No
AV2455DN-F/S	MPM8.0	13.5 meters (44ft)	Yes	No	No	No	No
AV2455DN-F/S	MPM12.0	21 meters (69ft)	Yes	Yes	No	No	No
AV2455DN-F/S	MPM16.0	27.5 meters (90ft)	Yes	Yes	No	No	No
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60ppf / 196ppm SituationalPLUS<sup>+</sup>



- SituationalPLUS<sup>+</sup> encompasses many factors besides sensor / image resolution.
- Other factors can affect image quality:
  - Optic Quality
  - Image Compression Settings
  - Camera Settings
  - Camera Position





#### Lenses are Not All Created Equal

- Customers expect to get higher image quality and resolution with megapixel cameras.
- Not all lenses marked megapixel are of equal quality because there are no standards for specifying "megapixel" quality.
- The higher the pixel count of the sensor, the more important a high quality lens becomes for optimal image quality.
- Lenses from two different manufacturers can vary greatly in specification.
- How do I tell what quality lens is being used on the camera I am considering?
  - Specifications like line pairs per millimeter (lp/mm) which might provide some measure to compare are
    often not disclosed in the manufacture specifications.
  - The physical pixel size can vary for different imagers as well so a lens rated with a high lp/mm for a 1/3" imager may perform differently on a 1/2.5" imager.
  - Manufacturing high quality/ low aberration optics is more challenging for smaller C/CS format lenses.

## Lenses are Not All Created Equal

**Arecont Vision**°

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• There are several types of lenses Lenses are rated based on in-house testing ٠ Arecont Vision also tests many top tier manufacturers' lenses **10MP** 1.2MP 1.3MP 1080p 3MP 5MP Good Available from some 3<sup>rd</sup> Party Vendors\* Low Cost • Good Enough 1080p: 111 lp/mm **Better** Arecont Vision MPM & MPL MP Lens Line\* Cost Competitive • High Quality 5MP: 151 lp/mm **Best** Arecont Vision Ultra HD MP Lens Line\* /+ Most Expensive • High Quality Rated for Ultra High MP **Resolution Cameras** 10MP: 200 lp/mm Line Pairs (Ip)/mm \*There are other excellent lenses available from 3rd parties, but be careful. = Okay to use + = Recommended



 Low quality lens = less details, more pixelated



 High quality lens = more details, crisp edges





- Comparing Optics
  - Low quality lens, insufficient details

• High quality lens, more details



Note: color fringing from chromatic aberration



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• Trying to save on bandwidth or storage will have a negative impact on image quality.



## Low Compression

Crisp detailed image



# High Compression

Loss of details



• Highly compressed video will sacrifice image quality.



 Requires more storage but results in a crisper detailed image



 Requires less storage but results in loss of details with many artifacts

## **Camera Position Matters**





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• Even if a scene is calculated with the right resolution and right optics, if the position of the camera is wrong important details will be lost.

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#### 6 Steps to SituationalPLUS+ every time

• The lens is the first element in the image pipeline, resolution limitations introduced there can never be compensated for by the sensor or image processing.





- At Arecont Vision<sup>®</sup>, we believe in providing the **Right Resolution** with the **Right Optics** for the **Right Scene**. Every scene, situation, challenge, and environment is unique.
- The Arecont Vision<sup>®</sup> SituationalPLUS+ approach makes it easy to select the appropriate resolution and optics to fit your unique surveillance needs.







### SituationalPLUS+ Dedicated Tool - Preview!

- SituationalPLUS+ Dedicated Calculator
  - Objective: provide users a dedicated solution that encompasses all calculators into one tool.
    - Field of View Calculator
    - Bandwidth Calculator
    - Storage Calculator
    - Product Selector Tool
  - Benefits:
    - Better Solutions
    - Improved Process
    - Consistent Look and Feel
    - Higher Consistency for Calculations
    - Better Ease of Use

# **Product Update**



New Products



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# SurroundVideo® G5

## **Highlighted New Features Include:**

- Remote Focus And P-Iris Lenses
- Double the Frame Rate Compared To Existing 12MP And 20MP Models
- New 5MP STELLAR™ Model
- All Black Gimbal



# MegaVideo<sup>®</sup> Flex



- Tethered camera
- Cable run up to 40 feet
- Sensor Unit:
  - M12 lens options: 2.8mm, 4mm, 6mm, 8mm, 12mm, 16mm
  - Remote focus and Day/Night functionality
  - IP66
  - H-FOV: 20° ~ 114°
  - Optional IR
- Main Unit:
  - 1080p, 1080p WDR, 3MP, 3MP WDR, 5MP
  - SD card functionality



Sneak Peek



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# SurroundVideo<sup>®</sup> Omni G2

### **Highlighted New Features Include:**

- Remote Focus Still Able To Change Lenses
- 3 Axis Gimbal
- Double the frame rate







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