

CUSTOMER

The Orange County Convention Center (OCCC), located in the heart of the Orlando, Florida tourism district, is the nation's second largest convention facility and a world-class destination. The complex is comprised of two separate buildings connected by a 1,500-foot, open-air bridge with moving sidewalks across International Drive. It offers 2.1 million square feet of exhibition space plus 480,000 square feet of function space, including meeting rooms. OCCC is owned and operated by the Orange County Government.

CHALLENGE

OCCC sought to increase the effectiveness of their surveillance operations by replacing its analog cameras and video encoders with superior performance IP cameras. The process began with a survey of existing analog cameras and their physical placement to best define locations for the new camera system. During an extensive camera evaluation process, Manny Rustia, MIS Analyst for the OCCC, and his colleagues narrowed the choice down to cameras with resolution above 3 megapixels with H.264 compression and day/night capabilities as a way of "future-proofing" the system.



Look Closer™
Case Study

Orlando's Convention Center Upgrades to Arecont Vision Megapixel Video

Arecont Vision 5-Megapixel Cameras Keep Watchful Eye on 2.5 Million Square Foot Facility



OCCC sought to increase the effectiveness of their surveillance operations by replacing its analog cameras with Arecont Vision's superior performance cameras

MEGAPIXEL SOLUTION

John McKenzie, business development manager for integrator EMC Physical Security Solutions, introduced Arecont Vision megapixel video cameras to Orange County. EMC Physical Security provides enterprise network security, video surveillance and information management and storage to increase customers'

ability to detect, deter and analyze security events in real-time. OCCC evaluated cameras from various suppliers before deciding on Arecont Vision 5-megapixel IP cameras. "Arecont Vision was the hands-down stand-out based on megapixel quality and price," said Rustia.

OCCC's networking and management infor-

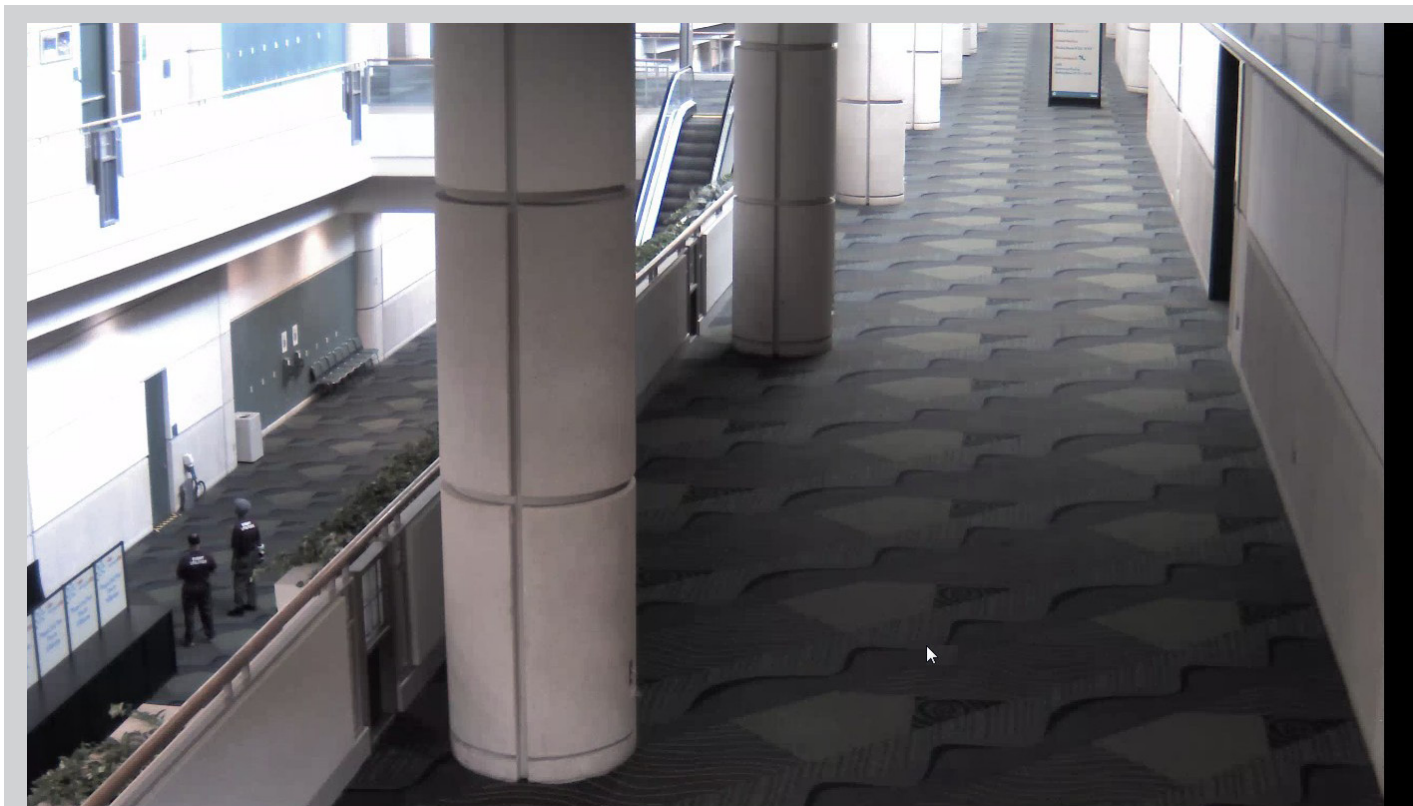
AV5105DN

5 Megapixel H.264 IP MegaVideo® Camera

Key Features

- 2592(H)x1944(V)
- 0.3 Lux @ F1.4
- H.264 (MPEG4, Part 10), Motion JPEG
- 1/2.5" CMOS Sensor
- Forensic Zooming
- Motion detection
- Motorized IR cut filter (DN Version)





During an extensive camera evaluation process, the MIS Analyst for the OCCC narrowed the choice down to cameras with resolution above 3 megapixels with H.264 compression and day/night capabilities as a way of “future-proofing” the system.

mation systems (MIS) staff designed the IP video surveillance system built around Arecont Vision 5 megapixel cameras. Approximately 350 cameras are strategically positioned throughout the interior and around the perimeter of the OCCC's West Building. The system includes one administrative server and 10 camera servers to date with about 30 to 40 cameras per server. Each server and camera is allocated archive disk space with “live storage” kept on each relative server. This allows OCCC management to view live video with full electronic PTZ imaging capabilities while simultaneously recording full screen images – a capability simply not achievable with conventional IP or analog cameras. The system uses an OnSSI digital video recorder (DVR) chosen by the Orlando Police Department (OPD) in conjunction with the Orange County government.

The OCCC uses Arecont Vision's AV5105DN, a 5-megapixel day/night camera to provide 2,592 x 1,944-pixel images at 9 frames-per-second. Light sensitivity is 0.3 lux at F1.4. The camera

uses H.264 (MPEG 4, Part 10) compression to minimize system bandwidth and storage needs. The AV5105DN can also be used at lower resolutions for various frame rates up to full motion. The camera provides full-motion progressive-scan 1280x1024

video at 30 frames-per-second (fps), 1600x1200-pixel video at 24 fps or 2048x1536 at 15 fps. The camera incorporates Arecont Vision's MegaVideo image processing at 80 billion operations per second. Features include forensic zooming to zero-in and view the details of a recorded image, motion detec-

tion and image cropping. The camera's day/night version used at the Orange County Convention Center includes a motorized infrared (IR) cut filter. The camera can output multiple image formats, allowing the simultaneous viewing of the full-resolution field-of-view and regions of interest for high-definition forensic zooming.

The all-in-one integrated dome version of the camera is also among the cameras used at the Orange County Convention

“ Arecont Vision was hands-down stand-out based on megapixel quality and price. ”

Center. Arecont Vision's AV5155DN is an integrated 5 megapixel camera, lens and IP66-rated dome housing (to withstand environmental conditions such as dust and water). The MegaDome® model includes a camera gimbal with 360-degree pan and 90-degree tilt adjustments. Other specifications are similar to the AV5105DN box camera.

MEGAPIXEL BENEFITS

Rustia said the Arecont Vision megapixel IP cameras are working extremely well and provide broader coverage with fewer cameras as a result of their higher resolution. Additionally, the new system produces superior images in both day and evening lighting conditions while minimizing video streaming and storage bandwidth allocations as a result of the units' H.264 compression.

Cameras inside and outside the facility provide video images with extreme clarity 24/7. Rustia said a benefit of the Arecont Vision cameras is "great, stunning, megapixel quality." In addition to greater image clarity, the megapixel cameras' ability to cover more square footage using fewer cameras versus conventional IP cameras helps to lower the total cost of ownership of the system. The megapixel IP cameras allow operators to zoom in on specific areas of live or archived video to see important details such as a license plate number.

Arecont Vision has been responsive to the end-user's needs. "In a nutshell, without Patrick Kelly (of Southeast Security Products, Arecont Vision's manufacturer's rep firm) and John Bujarski (Arecont Vision's Southeast U.S. sales manager), I would be driving without headlights," said Rustia. "We are highly appreciative of their on-going support and expertise."



AV5155DN

5 Megapixel H.264 IP MegaDome® Camera

Key Features

- 2592(H)x1944(V)
- 9 fps @ 2592(H)x1944(V)
- H.264 (MPEG4, Part 10), Motion JPEG
- 0.3 Lux @ F1.4
- Integrated 5 MP H.264 megapixel camera, lens, and IP66 dome housing
- Camera gimbal with 360° pan and 90° tilt adjustment
- Vandal Resistant, Forensic Zooming

Arecont Vision is the leading manufacturer of high-performance megapixel IP cameras and associated software. Arecont Vision products are made in the USA and feature low-cost massively parallel image processing architectures MegaVideo® and SurroundVideo® that represent a drastic departure from traditional analog and network camera designs. All-in-one products such as MegaDome®, MegaView™, and D4F/D4S series provide installer friendly solutions. Compact JPEG and H.264 series of cameras address cost sensitive applications. These innovative technologies enable Arecont Vision to deliver multi-megapixel digital video at IP VGA camera price points.

 **Arecont Vision**
megapixel technology...
beyond imagination