

## 5-Megapixel Cameras Watch Perimeter Zone for Merck Facility Near Mexico City

Motion Triggers Video Day or Night;  
Resolution Can Identify Faces  
and License Plates



### Customer

Merck is the second-largest healthcare company in the world and a global leader in consumer products and animal care. Over the years, Merck researchers have created ways to treat and prevent a range of illnesses, from the discovery of vitamin B1, to the first measles vaccine, to cold remedies and antacids, and the first statin drugs used to treat high cholesterol. The large pharmaceutical company has constructed corporate laboratories in Naucalpan de Juárez, Mexico, a municipality just northwest of Mexico City.

### Challenge

Merck S.A. De. C.V. was looking for video technology to provide day and night surveillance of the perimeter zone at the corporate laboratories in Mexico. The company needed high resolution and sharp images to enable identification of faces and license plates, but analog technology fell short of meeting their needs.

### Megapixel Solution

To provide high-quality video for surveillance of the perimeter zone at Merck's newly constructed laboratories, Ariel Maldujano, head of management and technology services, turned to Alarmas Universales, an integrator company with 38 years of experience in the market. Marco A. Godina of Alarmas Universales designed and installed the new system at the Merck facility in Mexico. When looking for technology to provide higher-quality video imaging, Mr. Godina learned about Arecont Vision through a manufacturer's representative.

Arecont Vision's 5 megapixel day/night cameras were the perfect choice to provide the resolution required for the application at Merck in Mexico, and Alarmas Universales installed five Arecont Vision AV5105DN cameras used with 12VM1040ASI (10mm – 40mm zoom) lenses inside 12 inch housings along the perimeter zone.



#### AV5105DN

MegaVideo® IP Camera

- Superior Low Light Performance:  
1/2.5" CMOS Sensor
- Dual Encoder H.264  
(MPEG Part 10) and MJPEG
- Fast MegaPixel Image Rates  
32 fps @ 1.3MP
- Bit Rate Control
- Multi-Streaming
- Forensic Zooming
- PoE & Auxiliary Power:  
12-48 VDC / 24 VAC

Arecont Vision's Model AV5105DN is a 5 megapixel day/night camera providing 2,592 x 1,944-pixel images at 9 frames-per-second (fps). 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 1280 x 1024 video at 30(fps), 1600 x 1200-pixel video at 24fps or 2,048 x 1,536 at 15fps.

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 detection and image cropping. The camera's day/night version used at the Merck application in Mexico 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.

## Megapixel Benefits

The quality of Arecont Vision megapixel cameras is a huge selling point, and Mr. Godina of Alarmas Universales said, "We never forgot that Arecont Vision pioneered megapixel technology." The quality of the megapixel image was most important, and another benefit noted by the integrator is Arecont Vision's digital zoom capabilities. The sharper images have enabled the customer to identify faces and license plates. The system has performed well to-date, and Arecont Vision has been responsive to the needs of the integrator and the end-user.

Arecont Vision megapixel IP cameras provide better overall coverage with higher resolution for superior picture quality and better results. Arecont Vision cameras also provide broader coverage with fewer cameras. The system produces superior images in both daytime and evening lighting environments. In addition to greater image clarity, the megapixel cameras' ability to cover more area using fewer cameras versus conventional standard-resolution 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. The cameras combine image quality with smaller image files and improved video streaming using H.264 compression. Smaller file sizes reduce storage requirements.

## About Arecont Vision

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 the MegaDome®, MegaView™ and D4F/D4S/D4SO 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.

