

Arecont Vision
Megapixel Cameras
Lower System Costs
in South Korea
Application

Fewer Cameras are Needed
to Provide License Plate
Recognition for Ulju-gun
Municipal Surveillance Project



Customer

The city of Ulju-gun, Ulsan, South Korea, with its population of nearly 200,000 citizens, desired a new video surveillance system that was exceptional in capturing clear images of the numbers and letters on license plates. Vehicles are commonly used by people committing crimes and the government sought a system that could recognize a license plate number and lead to an arrest. Ulju-gun administrators incorporated opinions from the police department and other local organizations in implementing the new system.

Challenge

License Plate Recognition (LPR) is a useful capability of video surveillance systems, and reseller Viewrun Co. Ltd. in South Korea sought to use LPR for the Ulju-gun surveillance project. In its most basic terms, LPR consists of license plate recognition software that interfaces with video management system (VMS) software and IP-based surveillance cameras positioned to view license plates. The LPR software “reads” a license plate and is able to convert the image to text.

License plate recognition systems typically use one camera per lane to view license plates on passing vehicles. The installing dealer for the Ulju-gun surveillance project, Daesung Net Co., Ltd., was looking to reduce costs without compromising system performance. The systems integrator also wanted superior image quality, high resolution, acceptable video in minimum illumination situations and easy installation.

Megapixel Solution

Viewrun recommended the use of 70 Arecont Vision AV2105 IP-based 2 megapixel cameras integrated with Luxriot software to provide display and search features for the project. The 2 megapixel resolution of the Arecont Vision camera enables one camera to view two lanes rather than requiring a camera for each lane. This one simple change provided a 60 percent cost savings without compromising the system's ability to read license plates.



AV2105

MegaView® IP Camera

- Superior Low Light Performance : 1/2" CMOS Sensor
- Dual Encoder H.264 (MPEG Part 10) and MJPEG
- Fast MegaPixel Image Rates 24 fps
- Bit Rate Control
- Multi-Streaming
- Forensic Zooming
- PoE & Auxiliary Power: 12-48 VDC / 24 VAC

Arecont Vision model AV2105 is a 2 megapixel H.264 IP camera that provides video at 24 frames per second (fps). The camera uses H.264 compression to minimize bandwidth and storage needs. Features include forensic zooming to zero-in and view the details in real time or in a recorded image, motion detection and image cropping. The camera's day/night version includes a motorized infrared (IR) cut filter for clear black and white images in low light conditions. The AV2105 also incorporates Arecont Vision's MegaVideo® image processing that can output multiple streams, allowing the simultaneous viewing of the full-resolution field-of-view and regions of interest for high-definition forensic zooming. The camera's H.264 compression standard and superior low-light performance made it a natural choice for the project.



Megapixel Benefits

The benefit of using Arecont Vision megapixel video cameras with LPR is the increased resolution and wider coverage. There is an obvious improvement in performance over analog or IP VGA cameras, and the higher resolution allows the use of fewer cameras, which results in additional savings.



The picture quality and digital zoom capabilities of Arecont Vision cameras far exceed analog technology. An attribute of the Arecont Vision camera line is the ability to capture detailed video from larger areas. Combined with recent cost reductions in NVR storage and network switches, the use of fewer cameras provides high-quality video at minimum cost.

Megapixel imaging represents a significant upgrade in system functionality compared to standard-resolution cameras. In addition to lower bandwidth and storage requirements made possible by H.264 compression, use of megapixel cameras dramatically decreases costs related to other elements of a system, such as fewer software licenses, fewer lenses and a decrease in man-hours needed to install and manage the system. Using fewer cameras in the Ulju city surveillance project demonstrates that potential for cost savings.

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.