

Arecont Vision Megapixel Cameras

Monitor Crowds at Hsing Tian Kong Temple in Taiwan

Use of Fewer Cameras to Watch Larger Areas Simplifies Installation at Preserved Cultural Site



CUSTOMER:

Hsing Tian Kong Temple in Taipei, Taiwan, is devoted to Kuan Yu, the patron god of businessmen. The popular Taoist temple is relatively new in origin – it was constructed in 1967 – and is located on a street corner near the center of the country's capital city, occupying more than 7,000 square meters (75,000 square feet). Sculptures of dragons adorn the Hsing Tian Kong Temple's ornate design, which has become a popular attraction in the city.

CHALLENGE:

The temple's huge number of visitors suggested the need to enhance an existing analog

video surveillance system installed at the large facility. Specifically, visitors to the temple tended to leave their handbags under the table as they prayed, and the bags were often stolen. The previous analog system provided insufficient image detail to identify the thieves. Given that the temple is a preserved cultural site, installation of the system had to be simple and as non-invasive as possible to preserve the building's beautiful architectural design elements. Any enhancement of the existing video surveillance system also had to preserve the previous investment made in the analog video surveillance system.

These parameters established two primary design objectives for the new system enhancement project: 1) increase the video coverage capabilities of the system while minimizing alterations to the existing architecture/construction, and 2) complement the existing analog system to capitalize on previous investments in video surveillance.



MEGAPIXEL SOLUTION:

To update video surveillance, the Hsing Tian Kong Temple turned to Alpha Pricing, a leading network surveillance solutions provider in Taipei that serves the government sector, institutions and businesses nationwide.

An early adopter of IP-based video surveillance, Alpha Pricing developed a partnership with Milestone Systems in the year 2000 and became Milestone's primary distributor in the Greater

China region. Today, Alpha Pricing is a leading IP surveillance solution provider and has forged partnerships with some of the industry's top companies, including Arecont Vision, manufacturer of a wide range of megapixel network video cameras. Along with a local reseller, Alpha Pricing designed the video system for Hsing Tian Kong Temple and performed the installation.



Alpha Pricing created a centrally monitored system using Milestone's Xprotect Professional video management software. Other system components include a Longstor Storage Server, the EverFocus ECOR 264 (H.264-based) digital video recorder, and Edge-corE ES3528M and ES4308-PoE network switches. Power-over-Ethernet provides electricity to Arecont Vision's megapixel video cameras along the network without requiring a separate power connection, which simplified installation. The use of digital video encoders enabled the system to preserve the temple's previous investment in analog cameras, which are now tied into the networked system.

"Arecont Vision cameras are a great addition to boost the effectiveness of an IP-based system, and the cameras integrate easily with other system components while lowering overall system costs," said Steven Chen, Vice President of Alpha Pricing. "The enhanced details of megapixel images are a big improvement over analog images, and details can be critical to some applications."

Arecont Vision 5 megapixel cameras with 4.5-10mm vari-focal lenses and 2 megapixel cameras with 4.5-10mm and 8-16mm varifocal lenses provide clear, high-quality imaging for the temple. The 5 megapixel AV5105DN is a day/night camera that provides 2,592 x 1,944-pixel images at 9 frames-per-second. The camera uses H.264 (MPEG-4, Part 10) compression to minimize system bandwidth and storage needs, and can also be used at lower resolutions and various frame rates. The AV5105DN provides full-motion progressive-scan 1280x1024 video at 30 frames-per-second (fps), 1600x1200-pixel video at 24 fps or 2048x1536 at 15 fps, and incorporates Arecont Vision's MegaVideo® image processing at 80 billion operations per second. Features include forensic zooming, motion detection and image cropping.



Also used at the temple is the day/night version of Arecont Vision Model AV2105, a 2 megapixel H.264 IP camera that provides 24 frames-per-second of 1600x1200-pixel video. The 2 megapixel camera also incorporates MegaVideo® image processing and has features similar to the 5 megapixel model, including H.264 compression to minimize bandwidth and storage needs.

MEGAPIXEL BENEFITS:

The video quality and overall cost-efficiency of the Arecont Vision cameras were the deciding factors for this project. Additionally, the integrator noted the cameras' ease of installation, which was a critical factor, given the nature of the installation and the customer's design objectives.



The IP-based network video solution lets Hsing Tian Kong Temple enjoy the advantages of digital surveillance without giving up the investment in its existing analog video surveillance system. Now, superior image quality is readily available when necessary, and the monthly cost for relevant equipment maintenance is 15 percent lower. The centralized video system has significantly streamlined management.

The picture quality and digital zoom capabilities of Arecont Vision cameras far exceed analog technology and allow the Hsing Tian Kong Temple to capture and retrieve usable video over large coverage areas. More detailed video now provides clear evidence of the handbag thefts and also enables identification of the thieves.

An attribute of the Arecont Vision camera line is the ability to install fewer cameras while capturing video from larger areas. Combined with recent cost reductions in NVR storage and network switches, the use of fewer cameras allows the temple to transition to high-quality video at a minimum increase in cost.

"Megapixel imaging represents a significant upgrade in system functionality compared to standard-resolution cameras," said Becky Zhou, Asia Pacific Sales Director, Arecont Vision. "The Hsing Tian Kong Temple application clearly demonstrates the benefits of higher-resolution megapixel imaging to boost system effectiveness even at sites with existing analog

systems.”

In addition to lower bandwidth and storage requirements, 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 bring it all together.

Arecont Vision collaborates with more than 100 video recording suppliers such as Milestone Systems to ensure smooth integration of Arecont Vision megapixel cameras. Arecont Vision also works with technology partners for tighter integration with complementary products, including servers, storage and other systems, which makes the integrator's job even easier.

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 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.

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