

Leading the Way in Megapixel Video

Customer

Brisbane Markets Ltd. serves a vital role in Australia's national food chain and provides a clearinghouse for produce from about 7,000 growers. Brisbane Markets Ltd. incorporates the Brisbane Produce Market, Brisbane Flower Market, Brisbane MarketPlace (public), Brisbane Markets South Gate industrial estate and Brisbane Markets Commercial Center. The 150-acre site in the industrial area of Rocklea includes 35 buildings and serves as the heart of Brisbane's fresh produce sales and distribution. Brisbane Markets Ltd. leases space to 254 tenants, including 53 primary wholesalers and 90 support businesses.

Challenge

Brisbane Markets Ltd. uses video for general surveillance, loss prevention, traffic, access control and incident investigation. The market's previous 15-year-old analog system had been upgraded to digital recording, but never gave operators the value they required. Most video is viewed after the fact and picture quality is essential to allow for the identification of people's faces. This large site has a wide range of environments that require cameras offering a diverse capabilities. Brisbane Markets had begun testing a small, seven-camera IP video system when the Queensland floods of 2011 submerged the market site in water and destroyed the existing DVRs along with almost all of the site's infrastructure. In effect, the flood accelerated the transition to IP video because the entire system had to be rebuilt from the ground up.

Brisbane Markets Ltd. Upgrades to Megapixel Imaging

Arecont Vision Cameras Provide Expanded Coverage Area at 150-Acre Produce Facility



The Brisbane Markets Commercial Center is protected by a surveillance system using Arecont Vision MegaVideo® IP megapixel cameras.

MEGAPIXEL SOLUTION

After the flood, Brisbane Markets made a decision to install IP cameras. Luckily, they had already been testing various IP solutions, which made the process easier. Choosing camera locations and maximizing camera coverage involved "trial by installation," with integrators making decisions based on physical demonstrations during the course of the project, said Steve Ward, director of integrator Sunstate Security.

Currently there are approximately 100 video cameras covering the site, and plans are in place to install another 40. Arecont Vision equipment used at Brisbane Markets Ltd. includes 1.3-megapixel and 3-megapixel cameras that capture larger scenes with precise detail to enable forensic investigations. Mr. Ward handled the

installation in the wake of the Queensland flood. There was no power and everything was covered in mud.

In some camera locations, Brisbane Markets Ltd. uses Arecont Vision's MegaVideo® AV3130 series network camera, a unique dual-sensor, day/night 3/1.3-megapixel IP camera that delivers up to 15 frames per second (fps) at 2,048x1,536 pixels of high-definition color using a 3.0-megapixel sensor. It is a versatile camera suited to the variable 24-hour lighting conditions in the Brisbane Markets environment. In low-light conditions, the AV3130 changes from color to black-and-white mode using a separate 1.3-megapixel sensor, and the camera's frame rate increases to a maximum of 30fps at 1280x1024 pixels. Light

MegaVideo®

3 Megapixel Dual Sensor IP Camera

AV3130

- Up to 15 fps/30 fps in 3/1.3 megapixel modes
- Color: 0.2 Lux @ F1.4, B/W: 0 Lux, IR Sensitive
- 1/2" CMOS Sensor
- Over 6 Billion Operations Per Second
- Forensic Zooming
- Region-of-Interest (ROI)
- Image Cropping
- On Camera Motion Detection
- Dual Sensor 1.3 Megapixel B/W and 3 Megapixel Color



AV3130

Brisbane Markets Ltd. Upgrades to Megapixel Imaging – 2

sensitivity is 0.02 lux at F1.4. The camera also offers simultaneous full field-of-view and region-of-interest (ROI) video, and image cropping allows streaming of full-density partial images.

Cameras are mounted on buildings and also on light poles in parking lots. The video system leverages a fiber-optic network running through the 150-acre site, and two dedicated NUJO servers (with a third on order) manage video for the system.

MEGAPIXEL BENEFIT

Using Arecont Vision megapixel cameras enables Brisbane Markets Ltd. to cover more area with fewer cameras. Ensuring maximum coverage was critical, and images from Arecont Vision cameras enable operators to achieve electronic pan-tilt-zoom (PTZ) functionality in a fixed megapixel image. When viewing a line of semi trailers, for example, an Arecont Vision camera can provide sufficient resolution to read license plate numbers using digital zoom. Jessie Field, Brisbane Markets Ltd. operations



(Left) Steve Ward, director of Sunstate Security, with Jessie Field, operations manager, Brisbane Markets Ltd.

manager, says megapixel cameras capture larger scenes with less cost than PTZs. “We learned through bitter experience that PTZs are often pointed in the wrong direction when we needed footage,” said Mr. Field.

Megapixel cameras also contribute to increased levels of detection, greater reliability and lower levels of crime. Comments from tenants at Brisbane Markets acknowledge the improved images, which reflect an overall better system in their eyes. They say that Arecont Vision images are extremely sharp, providing plenty of resolution to recognize faces. Tenants have seen greater results and less shrinkage in

their own businesses because of the Arecont Vision megapixel cameras.

Mr. Ward of Sunstate Security also said that Arecont Vision cameras are better in low-light, which is vital to effective surveillance at a 24-hour site, where trucks begin arriving at 10 p.m. and spend all night unloading.



Arecont Vision cameras in weather-resistant housings keep watch on the facility day and night.

‘Arecont Vision images are extremely sharp, providing plenty of resolution to recognize faces. Tenants have seen greater results and less shrinkage.’



Arecont Vision cameras provide 24-hour surveillance of the large Brisbane Markets loading docks.

Arecont Vision

Arecont Vision is the leading manufacturer of high-performance megapixel IP cameras. 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®, MegaBall®, MicroDome™ and D4F/D4S/D4SO series provide installer friendly solutions. True Wide Dynamic Range (WDR) and remote focus/remote zoom enhance camera utility. 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.

