

Leading the Way in Megapixel Video

Customer

The Sogaris Group is a French-based specialist in the design, development, investment, marketing, operation and management of multi-modal and urban freight logistic platforms. The multi-modal traffic hubs are located on strategic transport corridors and allow participants in the logistics supply chain to benefit from a wide range of services including transit-loading bays, warehousing, offices and general services such as security monitoring, maintenance services, living quarters, etc. Sogaris currently manages seven logistic platform locations throughout France with nearly 480,000 square meters of facilities. The company is at the forefront of the industry and continues to modernize its portfolio of properties, integrate new technologies, develop new projects and create new concepts to stay ahead of changes in the logistics profession.

Parking Management System Relies on Arecont Vision Megapixel Cameras

High Resolution Cameras Enhance License Plate Recognition at European Logistics Center



Sogaris Group utilized a custom developed automatic license plate reading system designed around Arecont Vision's IP megapixel cameras.

MEGAPIXEL SOLUTION

To improve entry and exit from the Rungis center, Sogaris implemented a parking facility management system that included both a ticket-based parking facility management system for visitors and a ticket-free private parking facility system for clients. Two entry and exit lanes for the ticket-based parking facility were added and the two existing entry and exit lanes were designated for exclusive use for the ticket-free private parking.

To meet the stated requirements of improving access speed, convenience and security, both parking management systems utilize a custom-developed automatic license plate reading (ALPR) system designed around Arecont Vision 1.3 Megapixel

MegaVideo®

1.3 Megapixel MJPEG MegaVideo[®] Camera

AV1300DN

- 1280(H) x 1024(V) pixel array
- O Lux, IR Sensitive (Black & White)
 O.1 Lux @ F1.8 (Color Model)
- Motion JPEG with 21 levels of quality
- 1/2" CMOS Sensor
- Over 6 Billion Operations Per Second
- Forensic Zooming
- Region-of-Interest (ROI)
- Image Cropping
- On Camera Motion Detection



Challenge

Opened in 1967, the Rungis logistic center is the oldest and largest facility managed by Sogaris. It is five minutes from Paris Orly airport and sits next to the Novatrans combined transport site and the Rungis International Market, which is the world's largest fresh produce wholesale market. Roadway access to the Rungis center is via two entry lanes and two exit lanes, and at the slightest access problem, long lines can form and spill over onto the nearby motorway. The most recent survey indicated that traffic at the site has increased to more than 400 vehicles per hour and more than 2,500 vehicles per entry lane per day. To resolve the congestion issues, Sogaris needed to separate the access for authorized and non-authorized vehicles and make it faster. more convenient and secure for both types of users to enter and exit the facility.

Case Study

Arecont Vision

Leading the Way in Megapixel Video

Parking Management System Relies on Arecont Vision Megapixel Cameras - 2



Arecont Vision integrated AV1300DN cameras with Rungis center's custom developed automatic license plate reading (ALPR) system for precision imaging.

AV1300DN MegaVideo[®] DayNight[™] cameras. The high resolution megapixel cameras, using fixed aperture lenses and automatic iris control, provide clear and detailed images, even in low light or extreme backlight conditions. The camera's on-board "region of interest" and "image cropping" features allow precise accuracy and higher resolution in capturing images of the license plates.

'Expanded coverage areas and day/night options of Arecont Vision cameras also contribute to a successful and effective new system.'

to eliminate the problem of unauthorized overnight parking.

To meet the stated requirements of improving access speed, convenience and security, both parking management systems utilize a custom-developed automatic license plate reading (ALPR) system designed around Arecont Vision 1.3 Megapixel AV1300DN MegaVideo® DayNight[™] cameras. The high resolution megapixel cameras, using fixed aperture lenses and automatic iris control, provide clear and

For the private parking region, the Arecont Vision megapixel cameras are installed in terminals

which are positioned a few meters in front of and behind the entry/exit barrier. As the trucks pull into or out of the terminal, the system reads and registers the trucks' front plates. Rear plates are also read to avoid vehicles entering in a procession or piggy-backing on the front vehicle. The front terminal is equipped with two cameras for double reading. On exiting, a data consistency check is performed. If a truck which entered without a trailer attempts to leave with a trailer attached and without validation, its exit is blocked and an operator is called.

The camera set-up is the same for the public parking system and provides an additional level of security for visitors to the Rungis center as well as helping

detailed images, even in low light or extreme backlight conditions. The camera's on-board "region of interest" and "image cropping" features allow precise accuracy and higher resolution in capturing images of the license plates.

For the private parking region, the Arecont Vision megapixel cameras are installed in terminals which are positioned a few meters in front of and behind the entry/exit barrier. As the trucks pull into or out of the terminal, the system reads and registers the trucks' front plates. Rear plates are also read to avoid vehicles entering in a procession or piggy-backing on the front vehicle. The front terminal is equipped with two cameras for double reading. On exiting,



Leading the Way in Megapixel Video

Parking Management System Relies on Arecont Vision Megapixel Cameras - 3

a data consistency check is performed. If a truck which entered without a trailer attempts to leave with a trailer attached and without validation, its exit is blocked and an operator is called.

The camera set-up is the same for the public parking system and provides an additional level of security for visitors to the Rungis center as well as helping to eliminate the problem of unauthorized overnight parking.

MEGAPIXEL BENEFIT

Arecont Vision megapixel cameras were selected by the integrator because of their high quality resolution and reliable performance, as well as compatibility

> 'Arecont Vision megapixel cameras were selected... because of their high quality resolution and reliable performance, as well as compatibility with the automated parking management system.'

with the automated parking management system. The cameras provide improved S/N (signal to noise) ratio, wider dynamic range and progressive scanning to more effectively handle the varying lighting conditions. Many camera functions, such as image cropping and motion detection, are integrated into the chip, making it the ideal choice for implementation in a parking management system.

"The automatic response of the Arecont Vision megapixel cameras is extremely intelligent," said Mr. Selon M. Detolle of Altaïr, one of the designers of the system. "The technology compensates for the glare of the headlights rather than averaging out the image, which can make the number plate darker. What's more, there is no halo effect hampering the reading of the plate number."



Arecont Vision's megapixel technology is now located throughout Sogaris, which currently manages seven logistic platforms with nearly 480,000 square meters of facilities.

In addition to the high quality resolution, the Arecont Vision AV 1300DN cameras are ideal for the application because they feature MJPEG compression, which is very robust and works well in applications where the recording can be set to a lower frame rate. For easier and more flexible installation, the cameras are designed with PoE (Power over Ethernet) capability.

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.

