ASAN GateKeeper boosts security in parking garages.

Enhancing security and improving service in some of Finland's biggest parking facilities.

Organization:
ForumP

Location:
Finland

Industry segment:
Transportation

Application:
Parking-garage monitoring with license plate recognition

Axis partner:
ASAN Security Technologies Ltd.

Mission

ASAN Security Technologies Ltd. developed a new method of identifying license plates on cars coming into or leaving a parking garage. A camera reads the plate and sends the data to a central server for processing. The solution requires excellent resolution for optimum recognition. At ForumP, one of Finland's biggest parking garages, the ASAN® GateKeeperTM solution has provided superb results.

Solution

ASAN GateKeeper uses Axis network cameras for the best image quality. ForumP had an analog surveillance system previously, but now it has been digitized with Axis video servers. Two ASAN servers store and manage the media and the identification of license plates.

Result

In ASAN GateKeeper, ForumP has the market's most secure system for monitoring traffic in and out of the garage. The risk for car theft has shrunk drastically, the number of error reports has dropped, and the system is already prepared for future intelligent video upgrades. The system offers 99.5% precision and can identify license plates from 49 countries.

AXIS®
COMMUNICATIONS

30756/EN/E2/0802

"One big advantage of the ASAN GateKeeper system is that is provides information on every vehicle that enters or leaves the garage. This speeds up the passage in and out, boosts security and allows for new services that facilitate parking."

Anton Stenfors, Business Development Director at ASAN Security Technologies

Security in focus

Traditionally, parking-garage monitoring has focused on tracking down people who skip out on the fee. And yet the value of the parked cars is often huge. A big garage with 1,000 or more spaces has a lot of people and many vehicles in movement at any given time, and it's hard to keep track of everything. One major problem is the traffic into and out of the garage, which is important not only for the parking fees, but also for maintaining the security of the drivers and their vehicles.

A common solution in garages with many regulars (such as parking garages at large workplaces) is RFID technology, where a computer chip placed in the car is read by a scanner that opens the doors.

ASAN GateKeeper focuses on the car's license plates instead. The car owner signs a contract with the company that manages the garage, and the license plate number is stored in a database. When the car arrives at the door, an Axis network camera reads the plate and sends the data to an ASAN server, which gives the command to open the door. The whole process takes less than three seconds.

The investment cost for ASAN GateKeeper is largely the same as for a traditional solution; the key difference is that the garage manager no longer has to keep buying new computer chips for the cars of new customers. For garages at airports, shopping centers and hotels, ASAN GateKeeper is a real opportunity, since the traditional chip solution doesn't work with garages that have many new visitors each day.

ASAN GateKeeper is primarily designed for big parking facilities with several entrances and exits. The system is currently installed in four of Finland's biggest garages, and after the first of the year, ASAN Security Technologies plans to launch a major marketing and export campaign to other countries.

"It's just a matter of time before ASAN GateKeeper is a standard in parking garages," Stenfors says. "Its precision and speed of identification, combined with extremely advanced functionality, make the system completely unique."

The resolution is critical

At ForumP, owner BK-Group Oy had identified a need to facilitate the logistics of traffic in and out of the garage. They also wanted to enhance security at the facility.

At project start, the garage already had a system of 30 analog cameras, and the first step for ASAN Security Technologies was to digitize the existing equipment. Axis video servers replaced the previous analog equipment. The solution is based on a dual-server architecture, where one ASAN server is used to store, manage and administrate, and another ASAN server is used solely to identify license plates. The advantage of this solution is that it allows a combination of network-based visual monitoring and license-plate recognition (LPR) functions. The system is linked to the existing parking system (SKIDATA APT450) to enable integration with the cash and invoicing systems.

Axis network cameras were chosen to monitor incoming and outgoing traffic. ASAN has worked with Axis products for about four years. "The image resolution was critical," Stenfors explains. "Our system depends on high, consistent image quality, and that didn't leave many alternatives to Axis cameras on the market."

Tests have shown that the system has a 99.5% precision. Today, the system can identify license plates from 49 countries, and it has the capacity to be expanded in the future to incorporate further applications for intelligent video. "ASAN GateKeeper is a system that will become increasingly intelligent," Stenfors concludes. "Our development department has excellent experience of using Axis equipment to develop new solutions, so we're very happy with our partnership."