

City of Ghent Belgian



The Belgian City of Ghent monitors parked Cars with MOBOTIX Cameras

300 Cameras for 3,000 Parking Spaces

The underground garage is clean and has a surprisingly pleasant smell. Everywhere there are arrows that clearly point the way. By taking the stairs or the elevator up, the drivers arrive directly to the downtown historic area of the Belgian city of Ghent. Nobody needs to worry about their car here because the city has gone to every length to make its underground garages as pleasant as possible. Cameras from MOBOTIX greatly contribute to this. If something happens to a car, it surely does not escape the vigilant eye of the MOBOTIX cameras. The city of Ghent's Parking Service regulates all parking activities within the city and its surroundings. The parking options, resident parking permits and the parking guidance system are included in its responsibility. The parking guidance system is a cleverly devised system that comfortably guides the driver to an open parking space. The city administration of Ghent is the initiator and operator of numerous underground garages including Vrijdagmarkt, Sint-Michiels, Reep, Ramen, Sint-Pietersplein and Belfort. Ghent

has a total of 22,000 street parking spaces and 4,700 parking spaces in parking garages; 2,670 of these covered parking spaces are operated by the Parking Service.

The Focus on Service For Parking Customers

The parking areas must be managed and monitored. For the city, it is important to give users a feeling of security and to fight against vandalism and theft. However, the city of Ghent is going one step further by offering a special service for its parking customers; video recordings of all incidents such as vandalism, break-ins and disorderly conduct. In addition to the deterrent function, the cameras are also of use in the later reconstruction of crimes. Formerly, some garages were equipped with analog cameras; however, the security officer could only use their images as a monitoring support. It was impossible for them to recognize license plates or the face of a criminal suspect. Geert Allary, IT Coordinator of the Ghent Parking Service. Soon saw the advantages of the MOBOTIX

solution, including cost savings, much higher image quality and extremely low installation expense.

Initial Test With Seven Cameras

In 2005 the Ghent Parking Service started with the first pilot project on the P+R parking lot in Oostakker, just within the city boundary. Initially, only seven cameras were installed and they immediately brought the desired result. "The MOBOTIX cameras proved their value at the Gentse Feesten 2005, an open air festival", said Geert Allary. "Thanks to the digital image storage, we were able to reconstruct several minor incidents without difficulty. The quality of the images was so high that they could be accepted as conclusive evidence. The criminal acts were solved while giving highest respect to the users' privacy." It was not long until new experiments took place with cameras in underground parking garages. In the two years to follow, the Vrijdagmarkt, Sint-Michiels, Reep, Sint-Pietersplein and Belfort garages were fully equipped with almost 300 cameras. Several of



Cost Savings And Optimum Image Quality

them have two lenses enabling them to take additional zoomed images of the license plates of the vehicles entering and departing. Compared with private garages, the large total number of cameras attracts attention. The city of Ghent would like not only to monitor the entrances and exits but also all other significant locations. In this way, not only is the best possible service offered, but suspicious persons can also be followed without interruption. The MOBOTIX cameras monitor the entrances and exits on all levels of the garage, the stairways, the emergency exits and the automatic payment machines as efficiently as possible. This is necessary because the security officers cannot always be on duty everywhere simultaneously and yet, they must still respond to incidents very quickly. Generally images are taken only when there is motion, thereby preventing the server from being overloaded by unnecessary images. Taken together, all images produce an

enormous data volume of approximately 1.2 terabytes per garage.

Remote Assessment Of Situations

In the control room of every garage, the staff uses the provided MxControlCenter software to switch between the incoming live images, and they can also go back to earlier images. The city of Ghent holds it important for a security officer to be available to the parking customers for service tasks as well. If a customer approaches him, he must be of assistance. This makes it impossible for him to keep an eye on the images at all times. In these situations the software is an excellent aid.

Occasionally the security officer also assists people who have difficulty operating the automatic payment machines. Thanks to the cameras, it is not necessary for him to go to where the machine is located; he can instead evaluate the situation

from his position. inserts the parking tickets into the machine the wrong way, the security officer can be of assistance via the intercom. The Ramen garage is only available to commuters during the week. Although the garage does not have a security officer on duty, the cameras convey a feeling of security. Only 500 meters away the security officer of the Sint-Michiels garage also sees the images of the neighboring garage. He can intervene if necessary.

Reconstruction of crimes

The police of Ghent have already been able to solve several crimes using MOBOTIX images. "Recently a car window was smashed and a navigation unit was stolen. The high-quality images enabled the police to find the perpetrator. Something like this would not even have been possible with analog images," said Geert Allary. Thus the images prove especially useful in later investigations. Other incidents caught by cameras



can also be investigated and eventually solved. These include urinating in hallways, vandalism in parking garages, burnt-out vehicles and theft. Under the Data Protection Act, the Parking Service had to apply for approval to store the images. Currently the recorded material may only be retained for seven days. The police know that they can request images from the Parking Service for up to seven days after the incident for the purpose of solving crimes. Approximately 6 terabytes of data are stored on the servers every week.

Special stainless steel housing

The Parking Service decided to order the MOBOTIX M12-DevKit cameras but with a different housing.

The Ghent Parking Service specifically requested high-resolution dome cameras combined with a customized stainless steel housing. MOBOTIX encountered no difficulties in fulfilling this special customer request. The entire installation took

very little time. In its tender, the Parking Service sought the most suitable installation firm based on various criteria (quality, experience, price, technical expertise). The firm RTS in Leper submitted the best quote and was awarded the contract. The Parking Service drew in the camera positions on a map of the underground garage. In cooperation with a subcontractor, the Parking Service itself installed the cables. RTS finally installed the units flawlessly. During the entire installation period, the Parking Service was in close contact with MOBOTIX.

MOBOTIX demonstrates Its Innovative strength

MOBOTIX continued to be an active partner of the Parking Service even after installation was completed. Feedback and new information were exchanged in regularly planned contacts. "It is a positive thing that MOBOTIX is open to suggestions from customers and frequently

includes new requests from customers in its design concepts. The company grows and develops in tune with the times and the market." In the future, the Parking Service would like to collaborate with MOBOTIX to add new functions to the software. The license plates of entering and departing vehicles are already being recorded. The system will now be expanded to include the ability to determine if a car with a certain license plate is in the garage at that specific moment.

MOBOTIX has developed and manufactured IP video systems, video management and analysis software in Germany since 2000.






MOBOTIX stands out for its **high level of reliability**. All outdoor cameras are subjected to a stress test for temperatures between -30°C and +60°C (-22°F and +140°F). Without additional components, without heating or cooling and with no moving parts (for example auto iris), they are virtually maintenance free.





MOBOTIX delivers a **perfectly matched package**, starting with the microSD card for storage management and HD audio (microphone and speaker) with VoIP telephony through video analysis, a professional video management system and motion detection software reducing false alarms.





The **decentralized architecture** means that a central computer is not required and the network load is minimal. The intelligent cameras from MOBOTIX process and store image data themselves, trigger events and, in the event of remote access, manage the frame rate and resolution depending on the available bandwidth.





The **6MP Moonlight sensors** and complementary **thermal imaging technology** ensure reliable detection of moving objects, even under the most challenging light conditions and over long distances. As a result, it is possible to cover large areas with just a few cameras. Less power cabling, less IT infrastructure and fewer additional light sources are needed. MOBOTIX cameras are powered using standard PoE and do not require more than 4-5 watts.


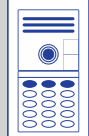


An intelligent IP video system from MOBOTIX allows you to **reduce total costs**. The investment pays for itself after a short time and the free-of-charge software and updates ensure it is a future-proof investment.

Outdoor Dual Lens			Thermal	
M15/16 AllroundDual	S15/16 FlexMount	D15/16 DualDome	M15/16 Thermal	S15/16 DualThermal
				
Robust for extreme conditions	Flexible dual camera	Modular dual camera	Thermal dual	Thermal dual

Outdoor Single Lens			
M25/26 Allround	S15M/26 FlexMount	Q25/26 Hemispheric	D25/26 Dome
			
Robust for extreme conditions	Discreet, video analysis	Discreet, video analysis	Modular Fix dome

Indoor			
i25/26 Panorama	c25/26 Hemispheric	p25/26 Allround	v25/26 MiniDome
			
180° hemispheric	Discreet, video analysis	Modular ceiling camera	Vandalism camera

Door Modules			MxDisplay+
Camera	BellRFID	Keypad	Remote Station
			

Door Sets			
Double Frame		Triple Frame	
			

Retailer information: