

La Collégiale Saint-Denis  
Liège, Belgium

# MOBOTIX

## CASE STUDY



MOBOTIX ... Security-Vision-Systems

## Wireless MOBOTIX Cameras Protect Millenary Church In Liège Against Theft And Vandalism

One of the oldest churches in Belgium, located in Liège, is La Collégiale Saint-Denis. It was founded in 987. To protect the numerous art treasures in the collegiate church from theft and vandalism and to avoid indecent behavior in this millenary church the wardens decided to install cameras. With the help from One Telecom and under juridical supervision to avoid damage to the precious church, 8 MOBOTIX cameras were installed in September 2014. Thanks to the decentralized concept of MOBOTIX, the cameras could be networked over power-line carrier (CPL). This would not have been possible with the classical centralized concept used in traditional camera systems.



Especially the altarpiece (retable) needed protection, as it is a unique piece and one of the best preserved in Belgium. The retable is made of polychromic wood

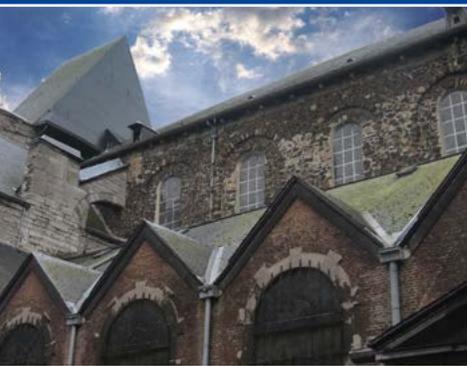
sculptures which can easily be cracked. The altarpiece was recently renovated with the financial support of the King Baudouin Foundation (an independent, pluralistic foundation working in Belgium and at a European and international level which seeks to change society for the better and invests in inspiring projects) and under the supervision of the Royal Institute for Cultural Heritage (Institut Royal du Patrimoine Artistique, IRPA).

### Thefts, vandalism and indecent behavior as drivers for (wireless) PLC powerline carrier camera monitoring

Philippe Vliegen, warden of La Collégiale Saint-Denis, explains: "In the past our church, which is open for the public 24/7, had to deal with thefts, acts of vandalism and indecent behavior. To put this to a stop, the church fabric decided to install cameras. However, this had to be done with utmost caution, as our church and its treasures are very valuable.

Security-Vision-Systems





## Real Time Monitoring In The Sacristy

There were no holes to be drilled and no cables to be seen. The installation process had to be conducted under the juridical supervision of the Royal Institute for Cultural Heritage.”

The church fabric wanted an cableless solution with intelligent cameras and a back-up system. They actively looked for the best fitted partner to lead this project. Philippe Vliegen met Amit Ram, the CEO of One Telecom, at the Salon des Mandataires, a yearly fair in Marche-en-Famenne. Philippe Vliegen explained the problems and Mr. Ram proposed a solution - including cameras, computer network connections and IT solution - to meet the church fabric’s requirements.

MOBOTIX’ cameras were selected by One Telecom and Jean-Marc Verbruggen was appointed as head of the project.

### Specifications of the installation process

In September 2014 8 MOBOTIX cameras were wirelessly installed. The different types installed are: Q25M Sec D12 (D12 Day sensor, Hemispheric Wide Angle of 12mm, a hemispherical dome camera for indoor and outdoor use. It is possible to survey a complete room (360° with only this one camera), the compact S15D FlexMount (a universally deployable, easy concealable video system with a highly detailed resolution of up to ten

megapixels. The fully weatherproof IP camera has two miniature sensor modules, which are each connected to the camera housing with a two-meter cable. Thanks to the hemispheric dual lens, two separate rooms can be secured simultaneously without any blind spots) and S15M (a mono hemispheric camera for concealed installation, with integrated on-board sensor and suitable for mounting behind a wall or ceiling. Robust and maintenance-free, without moving parts).

Unlike conventional analog and digital video security systems, with the decentralized MOBOTIX concept a high-speed computer, and a digital memory is built into every camera for long-term recording. The PC or video control center is required only to view and digitally control the cameras, not to evaluate and record video. Each MOBOTIX system can be flexibly expanded thanks to the decentralized system concept. This also means that no additional investments besides purchasing new cameras are required, such as recording devices or software licenses.

A power line connection and a network-attached storage (NAS) system were deployed also. The electrical board was customized to enable working on the same network.

There were led lights installed in the church zones that were identified earlier as particularly vulnerable. A perimeter



around the vulnerable zones was created to enable the detection of people approaching the precious objects. Now, should a person come too close to these objects, an alarm is activated.

Furthermore, all the entrances of the church are now being filmed and thanks to facial recognition the police can identify suspects.

In the sacristy the images of all cameras are monitored in real time. All the images filmed by the cameras are being stored on the NAS and can be consulted by the authorities or authorized people at any time.

**Discouraging for vandals, encouraging for the church fabric**

The church wardens are very pleased with the solution, that goes beyond their expectations. "Only a few days after the installation, the registered images could identify different uncivilized acts. Besides of the fact the implementation process went smoothly and without causing damage to our precious church, in the meantime the installation of the cameras has a proven dissuading effect on potential criminal offences," concludes Philippe Vliegen.



Q25M Hemispheric



S15D FlexMount



S15D with PTMount

Security-Vision-Systems





## MOBOTIX – Made in Germany: Innovative Technology, Reduced Total Costs

The German company MOBOTIX AG is known as the leading pioneer in network camera technology since its founding in 1999, and its decentralized concept has made high-resolution video systems cost-efficient.

### Increased Resolution Reduces Amount Of Cameras Needed

1536-line, high-resolution sensors give a better overview and allow users to monitor an entire room with just one camera.

### Reduced Installation Costs At Any Distance

Standard Ethernet connection enables the use of common network components such as fiber, copper and wireless (wi-fi).

### Intelligent Cameras Reduce The Number Of Recording Devices

The decentralized MOBOTIX concept makes it possible to store data from approximately ten times more cameras to a single storage device than is normally possible.

### Event-Controlled Image Format Minimizes Storage Costs

Automatic image adjustment (frame rate, size) based on movement, sound or signal input reduces the bandwidth and storage requirements.

### Low Power Costs, No Extra Heating

Anti-fogging without heating allows usage of standard PoE technology to power the system via Ethernet or two-wire cable, saving power cabling costs.

### Backup Power Supply Costs Reduced By Over 80 Percent

Low power consumption, approximately four watts, enables year-round PoE (no heating required) with one centralized UPS from installation room using the network cabling.

### Robust And Practically Maintenance-Free

Fiberglass-reinforced composite housing with built-in cable protection and no mechanical moving parts (no auto iris) guarantees longevity.

### Software For Thousands Of Cameras And Storage Devices Included

The right premium user interface software for every application: MxEasy for compact video solutions, MxControlCenter for professional control centers.

### Unlimited Scalability And High Return On Investment

While in use, more cameras and storage can be added at any time; image format, frame rate & recording parameters are camera specific.

### Additional Functions And Other Extras Included

Audio support, lens, wall mount and weatherproof housing (-30 to +60 °C; -22 to +140 °F) are included; microphone & speaker available in almost all models.

MOBOTIX AG  
Kaiserstrasse  
D-67722 Langmeil, Germany  
Tel.: +49 6302 9816-103  
Fax: +49 6302 9816-190  
E-Mail: sales@mobotix.com  
www.mobotix.com

Security-Vision-Systems

