



Reliable Infrastructure Protection

Entega chooses scalable MOBOTIX video security systems

As a leading energy and infrastructure service provider, Entega is one Germany's largest suppliers of green energy and climate-neutral natural gas. Entega generates and distributes energy in addition to its telecommunications, drinking water supply, wastewater treatment, waste incineration and IT services.

The Challenge — Maximum Security for a Large Site

The Entega AG premises cover a large site to the north of Darmstadt city center. The site is home to the company headquarters as well as offices belonging to its subsidiaries, and industrial areas such as the gas turbine power plant. This critical infrastructure needed to be protected from unauthorized access. In addition to protecting the site itself through perimeter protection, access control for employees and visitors was essential for all entrances and exits. Next to its premises, Entega AG also operates a public EV charging station with a waiting area that also needed to be protected from vandalism.

Solutions — A Visionary Thermal Concept

When the plans for updating the Entega video surveillance concept were being drawn up in 2018, the existing camera models in use were quite varied and not networked. The Entega project team contacted established MOBOTIX partner Peter Communication Systems (PETER-CS) from Aschaffenburg (Germany) based on its regional focus and excellent reputation — in particular its experience with practical applications of thermal cameras. The installation process was divided into several construction phases. A dedicated autonomous network infrastructure for the professional MOBOTIX video system was set up across the vast Entega premises. A variety of intelligent switches plus extensive fiber optic and copper cabling provide access for the entire site. The expertise offered by PETER-CS was pivotal in constructing the network infrastructure

MOBOTIX systems lead the way in terms of securing the site and associated buildings. The perimeter protection concept relies on thermal cameras to monitor the large outdoor area without any additional lighting, even in absolute darkness. High-resolution optical sensors are activated when movement is detected in one of the monitoring areas. A thermal overlay function displays

Key Data

Industry

Energy

Customer

Entega AG, Darmstadt

Partner

Peter Communication Systems GmbH, Aschaffenburg, Germany

Time frame

2020 - 2021

Solutions

87 MOBOTIX cameras, primarily M16 and T26 models



||

As a critical infrastructure company, it is essential for our facilities to run smoothly, particularly the turbine power plant. The energy that we supply to households must be guaranteed at all times. That's why we chose these reliable and scalable video systems from MOBOTIX.

||

Patrick Öhlenschläger, Entega AG, Property and Services Division

the thermal image over the visual image (in color or black and white), allowing the object (e.g. an intruder) to be easily located. Long pass filter (LPF) cameras at each site entrance greatly increase contrast on the images to ensure that vehicle registration plates can be easily recorded in all lighting conditions, even in darkness. MOBOTIX T26 door stations at every building entrance provide access control and function as intercom stations. The entire system is managed and controlled centrally via the MxManagementCenter. Four control centers and the multi-utility control center require access to the system. Integrating the Milestone video management system is one of the options being discussed for expanding the security concept to three other sites.

PETER-CS also managed the project's data protection and IT security considerations, offering advice and support to Entega throughout. A managed services concept is now in place, allowing PETER-CS to continue ensuring that the system always meets the latest requirements and guarantees high availability.

Conclusion — Thinking Ahead While Remaining Flexible

The updated video security system has now been implemented in full. Interestingly, several topics relevant to future physical changes to the site were taken into consideration from the outset of the project, including the ability to recognize vehicle registration plates in order to open barriers automatically. The ability to expand the system was included in the plan, which is why choosing a scalable system was so important. The decentralized approach and modular system provided by MOBOTIX delivers the flexibility required for this kind of expansion — something that will become necessary as early as next year. The security concept is currently being extended to include a new building. The initial development with more than ten additional cameras has already been completed.

"We looked at site security from all angles: In addition to the customer's perimeter protection requirements, the IT security of the components in use and data protection for the video being generated were core components of our planning and implementation concept."



Matthias Peter, CEO
Peter Communication Systems



