CASE STUDY

Commute safely.

Swiss Railways under the watchful gaze of Axis network cameras.

Organization:
Swiss Railways (Schweizerische Bundesbahn – SBB)

Location:
Zürich, Switzerland

Industry segment:
Transportation

Application:
Security for rail passengers and personnel

Axis partner:
Ruf Telematik

Mission

Switzerland is well known for its high security awareness. In keeping with this, Swiss Railways (SBB) decided to increase security in the Zurich S-Bahn by 2010 with the aid of network cameras. A particular requirement of the project was that the solution should run completely on IP networks and thus be able to be integrated into the existing IP/Ethernet network of the trains.

Solution

The Swiss-based Ruf Group won the contract to implement this project and was assigned the task of equipping 115 double-decker shuttle trains (DSTs) with a digital information and video surveillance system. While Ruf provided the displays in the trains, the computer platform and the complete video surveillance system with emergency telephones, Axis supplied the network cameras as a Ruf partner.

Result

The project evoked consistently positive reactions from the Swiss: this is certainly based not only on the relatively high safety requirement, but also on the additional reassurance provided by the video surveillance system. In addition, the successful project also created the basis for extending the security network, for example to the entire rail network including stations. The collaboration with the customer was also very enriching for Axis. This new order is a gratifying further development of the partnership with Ruf Telematik for the installation in the SBB traffic network.

For the transportation sector, in particular public, local mass transit, network cameras are extremely suitable: They deliver high image quality, are cost-effective to install and the security personnel can access the image material very easily.

AXIS COMMUNICATIONS

33149/EN/R1/0810

"With Axis, we've found a reliable partner which offers sound technology, simple assembly and full configuration and maintenance of the cameras. It was particularly important to us that they are network cameras, because analog technology will also die out in the environment of public transport."

Sven Schraven, responsible for product management and VisiWeb project leader at Ruf Telematik AG.

For every situation

Axis Communications developed a specially designed camera for this major order to meet the customer requirements: The required Pan/Tilt/Zoom-function (PTZ) of the AXIS 209MFD-R was made possible due to the usage of megapixel technology which not only permits every corner of the carriages to be monitored, but is also capable of delivering pin-sharp close-ups. In addition, this camera was equipped with an M12-connector in order to meet the EN 50155 standard for vehicles on tracks.

The palm-sized network camera is characterized by its robust design and, despite the shaking and high humidity inside mass transit vehicles, supplies digital video images of the highest quality. It is the first network camera on the market to take into account the environmental and surveillance requirements onboard transit vehicles.

The camera thus allows the installation of a system with which, when extraordinary events occur, the police and the employees of an alarm center can follow up on the incidents from outside the vehicle. For example, if a vandal sprays the camera with graffiti, shaving foam or the like, and covers the lens so that it can no longer record any images, the AXIS 209MFD-R triggers an alarm. At the next station, police will already be waiting to meet the offender.

Provision has even been made for icy temperatures: below freezing point, the AXIS 209MFD-R counteracts the formation of condensation and the associated impaired view by heating itself using Power over Ethernet. It was also necessary to make allowances for the opposite case of excessive heat. While SBB was testing the cameras exhaustively, it came to light that, in the event of high temperatures, the housing did not catch fire, but began to melt. SBB notified this problem to the manufacturer and Axis began developing a solution immediately. A changed mixture of materials proved resistant even to extreme conditions.