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Transportation and Mobility

# Reliable Video Solutions Tailored for Transportation

Camera robustness, Hemispheric technology and decentralized image and event management make MOBOTIX the logical choice for mobile security.



## **Challenge**

### Robust and Reliable in Every Vehicle at Any Speed

Operators of public and private transportation or of commercial cargo fleets are required to be more alert than ever against vandalism, theft and violence in order to stay competitive and attractive for passengers in the future. A key contribution is the decentralized, high-resolution video security technology from MOBOTIX; because perpetrators can be identified much faster with highly detailed and gapless recordings compared to conventional video systems.

"Video Secured by MOBOTIX" is confirmed to be a strong deterrence of potential offenders and will help to increase safety and security of passengers and drivers. In addition, vehicles have to be used most effectively and need to be localized at any time. Security installers worldwide are excited about the effectiveness and outstanding image quality of MOBOTIX systems.

# **Intelligent IP Video Solutions**

S15/16 FlexMount System is Ideal for Use in Vehicles





Coverage without any blind spots with only one dual camera

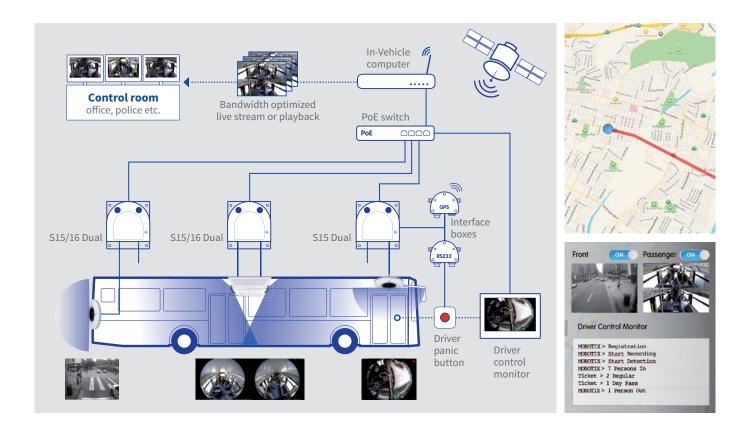
In order to ensure absolute reliability in mobile applications, even under extreme environmental conditions, S15/16 models of MOBOTIX have successfully passed the toughest certification tests\*.

Simple installation, low space requirements and the absence of expensive, fragile recording devices result in a cost-effective security solution for any type of vehicle. The S15/16 model of MOBOTIX, providing a protected mountable camera housing with integrated flash memory, is resistant against shock, vibration and temperature



variations. The ability to exchange the sensor module has proven to be cost-effective and practical, without having to dismantle the whole camera during transportation all recordings are maintained.

Smart and functional accessories enable the discrete operation to ensure passenger safety and protection against vandalism and damage in transport vehicles. The behavior of passengers and drivers can be documented at any time. It is important to know the status of the bus or truck; whether it is within the predefined operational area or does an incident require the support of the nearest Police station. Based on the transmission of the latest video and GPS data, emergency personnel can be directed quickly to the required location.



#### Discrete and Efficient with Hemispheric

The use of hemispheric technology in S15/16 or Q25/26 provides effective coverage of the complete vehicle interior with just one single camera. Installed with the surround mount in the middle of the bus, the entire passenger compartment is secured without any blind spot. An S15/16 or Q25/26 covers the complete area of the driver including entrance and outside. In addition, an external camera at the rear or front increases safety in and around the school bus. The consequent absence of moving parts and thus the guarantee of robustness, results in video solutions including recordings

which are known as nearly maintenance free. Instead of traditional hard drives, which are considered problematic and expensive in automotive environments, industry-standard SD-cards are integrated directly in the camera to provide reliable storage. Automatic video archiving and connection to IoT (Internet of Things) can be easily implemented upon arrival at the bus depot.

#### Protecting Critical Infrastructure For London Underground

A project to secure a London Underground depot required innovative solutions. By using MOBOTIX's decentralised concept and dual lens cameras, the proposal would dramatically reduce the number of cameras deployed on the site compared to other options while providing intelligent analytics able to detect site intruders during the day and night.

"This has proven a successful project," says John Hinds, Senior Telecommunications Engineer for London Underground, "and based on the results, it is an approach we could consider adopting at other sites across the Capital."





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

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

| Door Modules |          |        | MxDisplay+     |
|--------------|----------|--------|----------------|
| Camera       | BellRFID | Keypad | Remote Station |
|              |          | 00000  |                |

| Door Sets    |              |  |  |  |  |
|--------------|--------------|--|--|--|--|
| Double Frame | Triple Frame |  |  |  |  |
|              |              |  |  |  |  |

| Retailer information: |  |
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