Demand for electromobility and the expansion of charging infrastructure is constantly growing. CITYWATT, which is a member of “PRAML Group — The Energy Family” and employs over 300 people, is dedicated to meeting this demand. As a full-service provider, CITYWATT develops and operates custom 360° charging station concepts for its clients and, as a supplier of electricity for use in electric vehicles, ensures easy charging throughout Europe.

**Challenge — enabling high utilization**

Charging stations are usually operated without any staff on site. The ability to remotely manage the systems from a central location is therefore an important criterion. Drivers recharge the vehicle themselves, then receive a digital bill. Nevertheless, it is important to ensure that the system functions reliably at all times, is in good condition and any faults or damage can be avoided or explained. Supporting video security systems are essential and must be weather-resistant, i.e. able to withstand heat, cold, the wet, wind and dust.

What’s more, information on utilization is essential for operators as the number of drivers charging their vehicles determines the payback period for the site, and ensuring the charging stations are in good condition promotes sales.

**Solutions and benefits — a centralized overview**

At the fast-charging station in Thiersheim, a MOBOTIX M73 day/night IoT camera with IR emitter is used to monitor the entrance. A further two MOBOTIX MOVE dome cameras oversee the individual charging points. The main focus is to record footage in order to detect and document utilization, possible operating errors, damage and vandalism.

Since the site is usually unmanned, it is also important to minimize the amount of maintenance required for the recorders. For this reason, the Bridge is used to store the footage in a cybersecure and decentralized manner in the MOBOTIX CLOUD. Customers can conveniently access the data from a device of their choice, such as a smartphone or tablet, with a high level of data security (99%) when doing so. This enables direct, centralized monitoring and control of multiple sites around the clock. Access rights to the data in the MOBOTIX CLOUD can be defined individually for authorized users.

The video technology also provides important information about the charging behavior of drivers and the vehicles used. Evaluating this data enables site usage to be optimized — for example, it can help to make any future decisions about suitable locations or the number of charging points required.

**Conclusion — ready for expansion**

For CITYWATT, the simple scalability of the system is important. If the company chooses to expand its network of charging stations, it is able to add an almost unlimited number of cameras. Likewise, the storage capacity in the MOBOTIX CLOUD can be expanded as needed. All whilst providing a high level of cybersecurity, as data transmitted to the CLOUD is encrypted.

The use of the MOBOTIX M73 IoT camera offers plenty of potential for expansion. In future, the charging stations will use MOBOTIX 7 camera apps to control access, analyze the catchment area of drivers using the site or to speed up payment using registration number and vehicle recognition, for example.