An ALLIED UNIVERSAL® Company

Safeguarding the EV charging network

A G4S Case Study

G4S is proud to partner with one of the largest, most popular and fastest-growing electric vehicle charging networks in the UK. Here's how G4S designed and installed a security system to protect the client's charging points and in doing so, safeguard the client's revenue and reputation.

The Challenges

G4S' customer is one of the leading rapid electric vehicle charging networks in the UK, supplying over 1,000 charging points from Cornwall to the Scottish Highlands.

As part of the UK's planned transition to electric vehicles, the electrification of transport has seen substantial year on year growth. At the end of 2023 there were over 900,000 electric vehicles and 10,000 charging points in use . The customer is playing a major role in the successful expansion of the charging network.

The customer provides reliable and simple to use charging points that are thoughtfully placed across the UK; from convenient and local sites, such as in the car parks of pubs and leisure centres, to hubs on some of the UK's major roads.

However, the value of the metal contained in the charging point cables means they can be a target for metal theft, resulting in repair costs and loss of revenue incurred whilst the charging point remains non-operational.

Before partnering with G4S, the customer had no security system to protect the charging points. They also had no remote visibility of the charging points. This meant they remained unaware that theft or damage had taken place until their data showed that the charging point was not being used. Also, they had no information on the extent of the damage until their contractor arrived to undertake repair work.

The Goals

The customer needed a cost effective security solution that would act as a deterrent to metal thieves, help safeguard the equipment and simplify remote management.

In addition to acting as a visible deterrent to potential threat actors, the client wanted to be able to monitor their estate remotely, store footage and be alerted to potential threats as they arose.

Given the diverse geography, the client needed a security provider with the engineering reach and capability to support its rapidly expanding UK network.

The Solution

With most of the charging points located in open car parks, a traditionally monitored CCTV system with the use of AI to alert the team to unusual activity was not a viable option.

Instead, G4S designed and installed a cost-effective system which not only provided a deterrent, but also delivered threat alerts, the recording of footage and real-time visibility of the charging points for the customer.

In each location, G4S supplied and installed a pole-mounted ruggedised 360 fish-eye CCTV camera and network connection to record activity around each of the charging points.

The visible presence of cameras was designed to act as a deterrent, with the customer able to view any site or look back at footage using an easy to use app. The system includes an ANPR function to record number plates. Registration details of vehicles involved in incidents are captured and an alert is sent if a vehicle on a nominated 'watch list' is identified at any of the company's sites.

G4S engineering support team maintains the cameras and system on an ongoing basis, while the majority of the interaction with the system is handled by the customer via the easy to use app.

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The Results

The security system is providing a visible deterrent to potential metal thieves and is safeguarding the equipment, with the customer reporting a reduction in thefts.

The cameras are recording footage that can be used to help prevent future crime and support convictions. Registrations of vehicles involved in thefts can be input into the system to safeguard the charging points from future crime.

The easy to use app means that the customer's team are able to review footage when necessary, and undertake visual checks of charging points and the area around them.

The ability to view the charging point remotely after a theft is providing valuable information prior to the dispatch of the maintenance team.

G4S was able to provide a solution that met the client's objective of achieving an appropriate level of security in a cost-effective manner. The use of the app by the customer's team, with G4S providing support only when necessary, further ensures the cost effectiveness of the solution.

Comprehensive Security You Can Rely On

With the planned phasing out of diesel and petrol vehicles and the number of electric vehicles being used in the UK growing year on year, the expansion of the network to meet vehicle charging requirements is vital. Protecting the network from theft and damage, through appropriate and cost-effective security is an important part of achieving this expansion across the UK.

If you need an appropriate and cost-effective security system, contact G4S. One of our security experts will provide a personalised consultation and create a tailored security plan to meet your needs.

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