

Porthcawl's RNLI station improves public safety with network camera technology.

Safety and security improved through enhanced vision and image quality from Axis Communications and PC1.



Organization:

RNLI Porthcawl

Location:

Porthcawl, Wales, UK

Industry segment:

Tourism

Application:

Remote monitoring

Axis partner:

PC1

Mission

Porthcawl, Wales, boasts the second highest tidal rise and fall in the world and experienced among the highest rates of lifeboat callouts in the UK in 2015. With tides reaching speeds of up to 7 knots (8 mph), there are significant dangers in the area not present in other UK regions. With such an active sea, combined with high tourism levels, Porthcawl's RNLI station wanted to improve the safety and security of visitors, while increasing the efficiency of life-saving operations.

Solution

Through the installation of an AXIS Q1775-E Fixed Network Camera on the lifeboat station, combined with a high-tech weather station, the Porthcawl RNLI station gained access to cutting-edge technology, providing easy access to weather metrics, tide activity, conditions monitoring and more. A publicly accessible live-stream of seafront conditions, available to view online, allows those considering a visit to the area to monitor weather, supporting Porthcawl's tourism drive.

With a 10x optical zoom and autofocus capabilities, the RNLI decided the AXIS Q1775-E was the stand-out choice due to its weather resilience, providing 24/7 surveillance capabilities and excellent image quality, day and night.

Result

In addition to assisting with visitor and staff safety through further education on sea conditions and associated risks, the camera can provide cost savings above and beyond the initial cost of installation. With a minimum cost of a lifeboat launch estimated at £2,000, and 73 launches recorded in Porthcawl last year, this translates to an expenditure of at least £146,000. By further educating the public on the dangers of the sea and potentially preventing the need for just two launches, the total cost of installation would already be covered, ensuring the safety of both crew and public.

Porthcawl lifeboat station during adverse weather. Photo: Steve Jones / Porthcawl RNLI

“Tourism is a huge pull to the area. Not only do we see a huge number of people visit during the summer months, but we also have a large number of swimmers in the area, often without a marker float behind them. One of the fantastic things about this camera is the extra education it can provide – it helps people stay safer in the water, which means the lifeboats aren’t called out.”

Ian Stroud, retired Deputy Launch Authority and current Press Officer at Porthcawl RNLI.

Education as a tool to boost visitor safety

RNLI statistics for 2015 show 44.4 per cent of lifeboat launches during the period were due to persons in distress – either ashore, offshore, or with manual pleasure craft such as surfboards or kayaks. By fully informing and educating the public on the conditions they will face on any particular day and reducing the number of persons around the water during dangerous periods, the necessity of a lifeboat launch will be reduced – increasing the safety and security of visitors to the area.

As one of the most popular tourist destinations in Wales, Porthcawl sees a huge number of visitors – often with little to no experience of the conditions they will face. On average, there is a death every 18 months. This is often due to the adverse weather conditions, and has been a result of people jumping from the pier for recreation. The camera was installed in part as an educational tool, improving the security and safety of those in the area and those planning to visit. This was achieved through the camera stream, as well as the associated weather data being easily accessible online. This helps to educate potential visitors on the dangers of the sea, encouraging them to stay away during storms and poor weather conditions.

A key consideration was the weather conditions the camera would face, ranging from warm summer days to rough storms and ice. Continuous operation in rough weather is crucial when placed in a coastal location. Axis cameras are subjected to a variety of punishing environmental tests, ensuring extremely high standards.

Ian Stroud, retired Deputy Launch Authority and current Press Officer at Porthcawl RNLI, stated, “We wanted to have a view of the pier as it is such an important landmark, but also an incredibly dangerous one. This is viewable by members of the public, who can alert the lifeboat station if they see someone in distress. The quality of the camera is fantastic. One of the most significant

tasks a lifeboat station must undertake is observing the sea conditions so we can make judgements on the equipment that lifeboat operators will need. With the excellent picture quality, we can inform the teams exactly what is required, saving time on each launch and ultimately resulting in more lives saved.”

Interactive intelligence; Axis saving lives with the RNLI

The camera is intended to operate as an extension of the RNLI’s numerous learning tools, including the successful ‘respect the water’ campaign, showcasing the tagline “treat water with respect, not everyone can be saved.” As the camera grows in popularity, the potential also exists for members of the public to identify and call in any incidents or at risk persons, reducing the time from the original incident to the time it is reported and actioned.

A key benefit noted by the RNLI station in Porthcawl is the weather station working in tandem with the camera, providing the RNLI lifeboat operators with real-time information based on the weather and sea conditions they will face – all before the crew have put their lifejackets on.

In order to achieve this, the station chose PC1, an Axis partner specialising in IT installations and creative design services, to undertake the implementation. Graham Thomas, IT and Online Project Manager at PC1, stated, “We installed a weather station on-site and connected the installation to YouTube, allowing the public and lifeboat staff to view real-time images and accurate weather reports – including tide times. The station will soon receive a superfast fibre connection, allowing for a further upgrade of the system to take full advantage of AXIS Q1775-E’s HD capabilities. We can then seek an additional camera; one looking at the pier and another focussing on a portion of the coastal defence where waves crash up to 300 feet high.”



A view from Axis; the Porthcawl pier

“It’s more than just people watching, the technology can actually save lives. It’s great as it is at the moment, with our HD upgrade it can get even better.” Ian Stroud, retired Deputy Launch Authority and current Press Officer at Porthcawl RNLI.



*RNLI Operational Statistics 2015