

**Panasonic**



## A modern-day solution for a cutting-edge school

The story of Panasonic and St Teilo's Church in Wales School, Cardiff

SOLUTIONS FOR EDUCATION



# // A twenty-first century school building for twenty-first century learning and teaching... //

That's how St Teilo's School Church in Wales, Cardiff, describes itself following the construction of its brand new premises. And it was the ambitious goal for a project in which Panasonic played a critical role.

Discover the full story of how we designed, developed and installed a full CCTV, fire, intruder and access system for St Teilo's, helping to create one of the UK's most modern and safe learning environments.

## Building new opportunities for the students of south Wales

In March 2010, the Welsh Government launched the '21<sup>st</sup> Century Schools Programme', to support large-scale school building projects across Wales to meet 21st century educational needs. Part of this programme was a £25 million joint venture between Cardiff Council and the Church in Wales, which would see the build of the new St Teilo's Church in Wales High School, Cardiff.

With capacity for 1,440 students, featuring state-of-the-art facilities and designed by award-winning architects, Austin-Smith:Lord, the new school represented a fit-for-purpose learning establishment in which young people in South Wales could become empowered and ready for success in the wider world.

Panasonic's involvement in the project began when we were selected by the appointed electrical contractor, Evans Electrical, to design and deliver a fully integrated CCTV, fire, intruder and access system for the new school.

Working closely with Willmott Dixon, the main contractor, and Evans Electricals, we created a project plan that combined our years of experience and expertise in numerous technology categories.





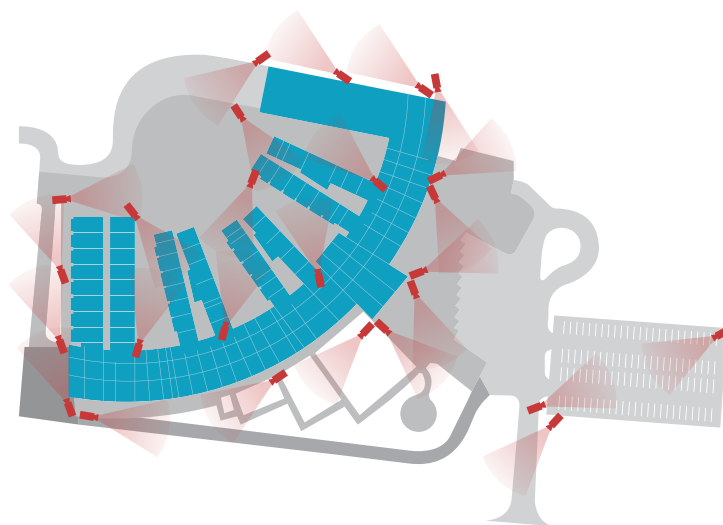


## Putting security at the heart of the school

The CCTV element of Panasonic's integrated solution was extremely ambitious. It featured no fewer than 26 vandal-proof external and 45 internal HD dome network cameras, and two 64-channel network video recorders, both capable of recording for 24 hours every day in 31-day periods. These were all connected via the school's IP network which gave access to authorised individuals.

The positioning of the external cameras was critical to the success of the system. By situating each of the 26 cameras at carefully chosen points around the building perimeter, we were able to provide visual recording on every entry and exit point.

### External camera views



One of the main innovations of the CCTV system came from our linking of the external cameras to the school's external lighting. So when movement was detected by the CCTV camera, a trigger was relayed via the PAM (Panasonic Alarm Management) software to the school's BMS (Building Management System), causing relevant external lights to be switched on automatically.





## An intelligent approach to the risk of fire

Like the CCTV system, the fire solution installed was ambitious and extensive, combining in excess of 1,100 individual devices.

The system was built around three panels – one situated in the main reception of the school, one in the sports complex and one in the Estate Manager's office. These three panels controlled 10 loops and 48 zones within the school. Every loop contained a range of detectors, isolators, alarms, sirens and beacons, all working in unison to deliver a comprehensive, intelligent fire safety system.

The system linked to a large number of other mechanical and electrical devices such as the BMS, fire sprinkler system, intruder system, door closures, shutters, etc. to trigger an event if the fire alarm sounds.



The way the system reacts to certain trigger events is equally intelligent, with different events provoking appropriate responses:

TRIGGER EVENT	RESPONSE
Pre-alarm, such as a detector approaching alarm activation threshold	Local alarm on fire alarm control panel
Full alarm, either from manual call point or detector	<ul style="list-style-type: none"><li>• All sounders activate throughout school</li><li>• All doors that have access control (inc. fire alarm doors) unlocked</li><li>• Automatic door closures activated</li><li>• Canteen shutters closed</li><li>• Gas supply is turned off</li><li>• Remote signalling to Alarm Receiving Centre to notify fire brigade and keyholder(s)</li><li>• Voltage-free output relays in locations to trigger third-party devices</li></ul>



I would like to pass on my thanks to the team from Panasonic and Evans Electrical who worked very closely with me in the procurement, installation and final commissioning of the project... I would have no objection in recommending them to future prospective clients.

Bill Clarke, Senior Services Engineer, Willmott Dixon Construction



### Detecting and preventing intrusions

Working with our security installation partner, Dragon Fire & Security Systems Ltd, a full intruder system was delivered. Intelligence and connectivity were once more key components of the system, with student safety and management, and the prevention of crime both priorities.

Consisting of control panels situated in the school reception and sports complex, panic alarms in the conference room, Headteacher's office and reception interview room, and PIR and dual-tech detectors, the intrusion detection system was connected via a dual-com communication system to an alarm receiving centre.



### Ensuring safe, secure access in all areas

Maintaining and monitoring secure access throughout St Teilo's was always a high priority within the project. With our partners we have installed a full access control system comprising of 32 access points for internal and external doors and lifts.





## A new term starts with a new school

It was a challenging project. One that required all of the expertise, experience and full engagement of the many different parties involved. But we're delighted to say that the new school was ready and waiting for the arrival of eager students as it opened its doors for the first time in September 2013.

In playing our role within the delivery of the new school, we brought to bear the many lessons we'd learned from years of delivering such projects. So we were able to call on solid, robust processes and systems that had been proven under the most intense scrutiny.

## A unique approach to a unique project

"From the point of view of student safety and school security, we're delighted with the Panasonic technology. It's an essential addition to our new school and is proving its worth right away. In terms of the project, the staff at Panasonic were always available if we had any questions and delivered on every agreement, on budget and on time."

Ian Loynd, Assistant Deputy Head

Our capabilities and approach to the project meant we offered something different to other companies tendering for the work. As a world-leading manufacturer, our ability to deliver the right products, with the right specification, in the right way at the right time, was unrivalled. But we went further than that.

Transparency, clarity and communication were hallmarks of our involvement. Applying rigorous, professional, Prince 2 project management principles, we took a thoroughly integrated approach,

holding weekly meetings with the client, ensuring that timings were adhered to and every contractor and sub-contractor knew exactly what was required of them, and when it was required.

Crucially, our approach was marked by honesty and pragmatism. What we said we would deliver, we delivered. Where a challenge was identified, we looked for a solution. And when the customer needed us, we were there for them.

## Time to start a new story with Panasonic?

Are you faced with an educational challenge? Would you like to discuss your ideas and questions with Panasonic?

E-Mail: [b2bsolutions@eu.panasonic.com](mailto:b2bsolutions@eu.panasonic.com)

Phone: +44 (0)8454 507949

Visit: [business.panasonic.eu](http://business.panasonic.eu)

