

# POLAR

## Case Study: University of Hertfordshire

---



The **University of Hertfordshire (UH)** in Hatfield recently rose to a record high ranking of 21st in the UK and perhaps almost as significantly has achieved the best employment rates for graduates in the East of England region, outscoring all Russell Group universities (including Oxford and Cambridge) within this criteria. No fewer than 96.2% of UH graduates went on to employment or further study within six months of finishing degree courses. These achievements reflect a highly progressive establishment which is an exemplar of scientific and technological innovation. As Hatfield Technical College (founded in 1952) the institution was at the forefront of developing 'new' subjects such as computer science. Always determined to offer its students the very best educational provision, the university recently brought together all its state of the art Science facilities under one roof and built a new £50 million science block, comprising teaching labs and exceptional research facilities. With AV systems now a fundamental part of educational processes, the university engaged audio-visual consultants Hewshott International to address this vital component of the new facility. Following a tendering process, audio-visual integration specialists Reflex Limited and POLAR through its POLAR Integrated Solutions team were brought on board and assisted in the planning and designing of a video system to meet the exacting needs of this highly prestigious facility.

The **POLAR** Integrated Solutions team has grown in recent years to meet sharply increasing demand for unified communications and video products (as well as its traditional audio base) and offers solutions design and support across its comprehensive portfolio of available products. Bringing a wealth of experience to the table, POLAR, working in conjunction with Reflex, took on the university's brief and delivered a solution which met with very enthusiastic approval.



# Case Study: University of Hertfordshire

The university wished to be able distribute any video source to any screen within the building. This might be simply within one teaching lab, from one lab to another or indeed to displays outside the immediate teaching environments. POLAR recommended a Wyrestorm solution. This award winning electronics manufacturer produces high quality HD distribution and control systems at the forefront of digital technology. POLAR designed a system that would enable the distribution of 59 different sources to 90 display units. Given the area and topography to be covered, much careful planning was required, however once planned, the installation of the system would be straightforward and offer a scalable solution that could be easily added to or restructured. In the initial stages of the project POLAR, in conjunction with its partners, staged a demonstration of the technology and offered the university a workshop session to better explain the simplicity behind setting up the solution from scratch.

59 x Wyrestorm NHD-IPTX transmitters (one for each source) were installed to take HDMI signals from the source units and encode them to JPEG2000 data streams. These streams are transmitted through a Cat 6 infrastructure through a number of Juniper 1G switches. The switches effectively behave as a video matrix switch to distribute the streams via further Cat 6 to 90 x Wyrestorm NHD-IPRX receivers assigned to each of the display units. Visually lossless, the streams are decoded by the receivers back to HDMI for output to the display.

The stream traffic is controlled by a NHD-IP-CTL controller receiving IP commands from a Crestron control system within each lab. It is worth emphasising that the compression and decompression involved in the JPEG2000 technology, contrary to some misperceptions, does not inevitably degrade the image. This was something that was held under close scrutiny by the critical eye of UH's Adam Harvey whose "image quality is king" mantra set a benchmark for the project and which he considered critical to its success.

Stuart Leader, Director of POLAR Integrated Solutions stresses the benefits:

"The Wyrestorm network HD offers a superb, flexible solution which is incredibly simple to install and operate. There is no requirement for special cabling - it operates on standard network cabling and its scalability means that there is no inherent 'waste' of inputs or outputs as may be the case using a traditional matrix system. If the university wishes to add any further inputs or outputs to the system, they can do so easily and incrementally in either case It is also easy to see how the obvious cost effectiveness of such a set up merits consideration. Video solutions are an ever-growing part of our business and as The University of Hertfordshire would doubtless agree, in Wyrestorm we are distributing an undisputed gem."

Adam Harvey, Solution Architect AV & Digital Media, University of Hertfordshire:

"Having developed the brief following user-consultation with academic and technical staff, we appointed Hewshott International to help us turn our idea into a fully formed tender document. This made sure we were asking exactly the right questions and Reflex's innovative response confirmed this. Using an AV over IP solution not only yielded significant cost savings over a more traditional system but allowed for a huge amount of flexibility and functionality. POLAR and Wyrestorm demonstrated the kit to the project team and based upon this and the support they offered the project, we went with the solution.

**Continued-**



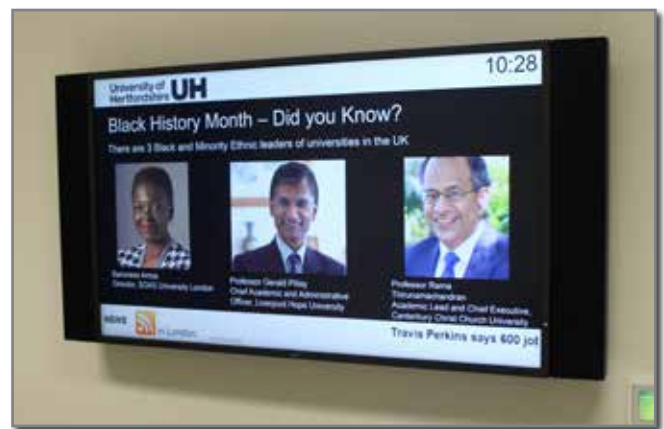
# Case Study: University of Hertfordshire

## Continued -

Overall, we are very pleased with the outcome. I think that we've been able to deliver an extremely flexible and future-proofed solution for the Science Building in an innovative way. There were some learning curves for UH and Reflex during the installation but we were very happy that Darren and Stuart from POLAR and James Meredith from Wyrestorm were always available to offer support and advice to the whole project team and attend the site when required.

This is a very different way to deliver a whole-building AV solution than our usual systems but working alongside extremely professional people with vast technical knowledge, made this project run very smoothly considering its size."

Across the world of Higher Education, video technology has become an absolutely essential educational tool. With the application of brilliantly conceived technology from Wyrestorm, delivered by POLAR Integrated Solutions and installed quickly and efficiently by Reflex, staff and students in UH's Science Block can see exactly what they want, where and whenever they want, as easily as switching on 90 screens.



## ABOUT POLAR:

**POLAR** is an established supplier of key industry brands into the installation, MI and professional audio and video markets, with exclusive UK distribution for brands such as Renkus Heinz, MACKIE, Beyerdynamic, Biamp, Avonic and Radial Engineering. Offering impeccable choice, its large stockholding ensures fast delivery, while its staff offer the highest level of sales and technical support. As a supplier of intelligent audio and video solutions, POLAR also works closely with its network of specialist systems integrators, to offer a host of professional services to its clients, including system design, product integration, project logistics and programming assistance.

