CASESTUDY

Royal Preston Hospital | UK

Upgrading to ABB Cylon® systems provides controls flexibility

Royal Preston Hospital is part of Lancashire Teaching Hospitals NHS Foundation Trust.

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01 Royal Preston Hospital – UK

Projekt Overview
It provides a full range of acute services for the people of Preston from 24-hour accident and emergency facilities to high dependency and coronary care units and maternity services.

The trust also provides a range of specialist services for the wider population of Lancashire and South Cumbria including: neurosurgery and neurology, oncology and complex cancer surgery and renal services. It also provides burns and plastic surgery and disablement services such as artificial limbs and wheelchairs.

The highest level of healthcare is provided from a modern, state-of-the art teaching hospital. The Hospital comprises of 50 buildings and a total area of 114,596m². It has 1000 beds and serves over 1.2m patients annually. The BMS is linked by a hospital wide Ethernet network, which ensures real time monitoring of all buildings. The annual energy bill stands at £3.4m.

“The ABB Cylon® BMS enables powerful central monitoring and control of energy consumption and allows us the flexibility we need to implement cost saving changes” John Allen, Energy Manager

Project Summary	
Applications:	Monitoring, Heating, Air handling, cooling, Metering
Points:	5,000 points
Number/Type of Building:	50 Buildings over an area of 114,596m²
Network:	Ethernet
ABB Cylon® Hardware Installed:	UC32 UCXX controllers
ABB Cylon® Software Installed:	UEC6 UCC

Solutions Benefits
The ABB Cylon® solution has allowed the Royal Preston Hospital to gradually replace ailing Honeywell systems with a more flexible and cost effective solution. The new solution allows effective implementation of the energy management policy.

Central Supervision – system supervisors have overall control of all HVAC systems in the hospital and the remotely located clinics

Flexible Control – surgeons and other key staff now can locally control temperature and humidity in critical areas such as operating theatres and x-ray

Seamless Integration – both Ethernet enabled UnitronUC32 systems and older Unitron 2000 systems are integrated with a single supervisor system on the hospital IT network

Ease of Use – the system enables the estates department to manage and alter the system themselves without constant reliance on manufacturer assistance

ABB Cylon® Solution

In the past Royal Preston Hospital has used a variety of BMS solutions. However ABB Cylon® is now the main system used. It has been very successfully implemented by Nobbs & Jones (a ABB Cylon® Approved System Integrator) in a variety of new buildings including: medical rehab unit, education and training wing, obstetrics & gynaecology building and a pharmacy.

The ABB Cylon® BMS controls the boiler plant, ventilation systems and radiant heating panels. The radiant heating system provides the flexibility needed to ensure patient and staff comfort. Building use is varied and includes state of the art delivery suites and operating theatres requiring exact control. The Trust's local clinics are linked to the main hospital buildings using a Wide Area Network (WAN). The whole system is managed from 3 supervisors in the estates office on the same Ethernet network. A range of energy saving measures have been successfully implemented including the use of occupancy sensors to step down heating levels when rooms are not in use. The very experienced energy management team are complemented by maintenance services provided by Nobbs & Jones.