



EMIS

Case Study



About

Egton Medical Information Systems Ltd (EMIS), based in Leeds, is estimated to hold the data for around 39 million patient records. It is the UK's leading supplier of healthcare software and related services to GP practices; with over 50% of GP practices currently in the UK utilising the EMIS system. EMIS began in the 1980's in a rural practice in Egton near Whitby in North Yorkshire. Dr Peter Sowerby and Dr David Stables wrote the software with the founding principle that the systems used by GP surgeries should improve patient care, and the idea of EMIS 'Written by doctors, for doctors' was born.

The Brief

Sudlows were awarded the contract to design and build a new ground floor data centre facility within the main IT building. The new data centre was required to increase its secure and resilient capacity for the company as it extends its range of healthcare software services to GP's and other healthcare providers. The solution was to design and commission a new data centre to operate alongside EMIS' existing operational IT facility.

Location:
Leeds, UK

Size:
100m²

Duration:
12 weeks



The Project

The very first set of Airedale InRak high efficiency, chilled water, in-row cooling units, to come off their production line were selected. These innovative units were chosen as part of an overall Airedale package for the cooling systems. The package incorporated free-cooling chillers and a touch screen data centre monitoring system.

Chilled water is provided to the InRak units via a pipe distribution system by two 180kW Airedale DeltaChill FreeCool ExtraQuiet air cooled chillers, offering N+1 redundancy. The equipment will guarantee annualised PUE of circa 1.3, as a system depending on available load. The design incorporates Cold- Aisle-Containment (CAC) to create low to medium density pods with an average 7kW critical load per rack.

Clean Power is provided by two 100kVA Riello UPS (Uninterruptible Power Supply) modules offering N+1 redundancy with the latest on-board transformerless technology.

The facility also includes a heavy duty raised access floor, Vesda fire detection and gas suppression, dual critical power supplies, overhead data containment and Airedale's ACIS building management system. This solution has delivered a top class facility and delivering considerable efficiencies in terms of both energy consumption and operational logistics.

Conclusion

The new facility at EMIS will provide the ideal platform for the company to expand its vital work and support both its NHS partners and the wider healthcare industry in testing and developing new software systems.

With the NHS increasingly acknowledging that information and IT are at the heart of new ways of working, EMIS and the new data centre are key elements in connecting and integrating NHS systems. This critical service will have significant influence in ensuring the continued growth and innovation of clinical software across the UK and internationally.

Testimonials

Mike Marchant, Data Centre Manager at EMIS said;

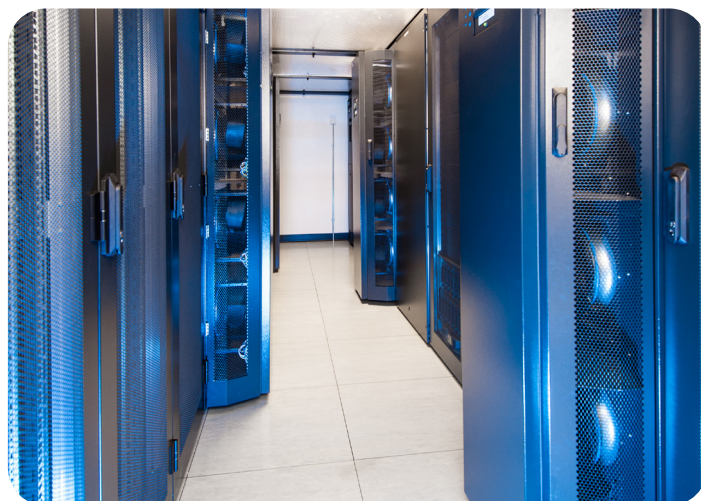
"We are looking to achieve Gold CEEDA* when the data centre is fully populated. Having the excellent team at Sudlows and Airedale's new efficient cooling solution in place should guarantee an annualised PUE of 1.3 for the room. "The design team at Sudlows produced truly innovative designs for our new data centre. This extension to our facility will give us the ideal platform to deliver and support our advanced software solutions, including our transformational healthcare system, EMIS web."

Gary Frith, Mechanical Services Director at Sudlows added;

"Data centre design, at this scale, demands an innovative engineering approach. It is these challenging scenarios that help raise standards within the data centre industry as a whole and it's inspiring to see the project delivery matching and exceeding client expectations."

Sudlows added;

"The opportunity to work with clients who are keen to look at how the latest technology can support both their physical infrastructure and improve their commercial operation is very exciting for our data centre team."



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