

Hospital Upgrade Provides Capacity for Today and Tomorrow >



Shielded C6A solutions like patch cords (above) and jacks (below) provide EMI protection ideal for healthcare environments

CUSTOMER PROFILE

The customer is a large district general hospital based in Wales. It operates a range of departments including major acute care and a major accident and emergency (A&E) ward, serving nearly half a million patients across the region.

THE CHALLENGE

Construction on the hospital began work in the 1970s. Even after it was formally opened, the hospital has undergone almost continual expansion work to improve facilities, add new units, and increase its capacity.

After several decades of service and expansion it became necessary to update the building and a complete refurbishment was approved. As part of this, it was identified that the building's old Cat 5e cabling system would no longer provide the performance necessary for modern or future data requirements, and this would need to be completely replaced.

A number of complications presented, including the difficulties in undertaking significant renovations in a working hospital, and the presence of hazardous materials onsite.

THE PRODUCT

Molex PowerCat 6A end to end cabling solution.

Compared with Category 5e, PowerCat 6A cable has more stringent noise and crosstalk characteristics. It offers far superior data transfer (10Gbps up to 100m) and bandwidth (500 MHz).

Shielded Cat 6A provides excellent protection against electromagnetic interference and radio-frequency interference – a critical consideration in healthcare facilities with sensitive diagnostic and treatment equipment.

In addition Cat 6A provides support for high-power PoE, ideal for IoT and building management devices such as CCTV, security doors and automated lighting systems.

THE SOLUTION

The seven-year project looks to completely overhaul the hospital and associated buildings, including a refit of its cabling infrastructure. As well as rewiring all the administrative, clinical and patient areas, this includes upgrading the wiring in on-site data centres and telecommunications rooms to provide Cat 6A performance end to end throughout the campus.

Demonstrating value for money is always essential in large-scale public projects like this. The superior performance of Cat 6A cabling, combined with Molex's 25-year system performance and application assurance warranty, will provide the hospital with an infrastructure that can support technological advancements and growing demand for years to come.

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