Reference report

Highest packing density within minimum space

tde - trans data elektronik develops new cabling solution for the University Hospital Münster (UKM)

Two data centres, an additional data room barely larger than 50 m², no raised floor and limited space for cables above the server rack – this was the situation tde – trans data elektronik encountered when starting the plans for a new cabling solution together with the University Hospital Münster. The project partners installed the angled version of tde's own cable system tSML in order to ensure highest packing density while at the same time guaranteeing high performance and easy handling.

The University Hospital Münster (UKM) is one of the largest and most successful hospitals of maximum medical care. In 2013 the UKM treated 58,000 in-patients and approximately 475,000 out-patients from Germany and abroad. More than 8,700 employees ensure a high quality of care and cover a broad range of services. In its main areas of expertise, namely inflammation and transplant medicine, cardiovascular medicine, pre- and perinatal care and reproductive medicine as well as neurological and tumour medicine, the University Hospital ranks among the leading medical-therapeutic high-performance centres even beyond the borders of the German Federal Republic. Just as in many other hospitals the IT department of the UKM also faces increased challenges. The amount of data is unceasingly growing, because hospitals digitalise ever more documents and processes. Much storage space is required by electronic patient files, x-ray pictures, and films of nuclear spin examinations. At the same time, the IT infrastructure has to ensure high transfer rates. Doctors and patients expect the securely stored health data readily accessible even after years – at the touch of a button, so to speak. The cabling also has to meet these increasing expectations.

Limited space for cables

In order to be able to cope with the future high demands on performance, capacity and availability, the UKM saw the need to install a new cable solution. The limited space of the roughly 50 m² room situated in the cellar posed an extra challenge. Structured network cabling was required, which in light of the limited space combined highest packing density with extremely high performance and easy handling. The solution also had to be extremely flexible for future expansions, safe against blackouts, and neutral towards the transmission protocol and the terminal equipment.

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Decision in favour of tde

UKM brought the network expert tde – trans data elektronik on board as a partner for the installation of the new cabling solution. The company based in Dortmund impressed with its competent service, high-quality manufactured products, and its high degree of flexibility. "When developing a cabling concept many aspects have to be considered, thought through and included in the planning at an early stage. In extensive discussions with the customers we talk about their wishes and requirements regarding configuration, measurement of length or assignments of cabling solutions. In doing so, we carefully focus on important aspects such as length restrictions and attenuation budgets", Elmar Herwig, Sales Engineer at tde explains. "Based on this information we then develop the customised applications."

tSML wins

In light of the limited space UKM and tde decided to install the angled version of tde's own semi-modular cable system tSML. The solution was to be based on entirely miniaturised cabling for the back space. The angled version of the tSML cable system serves to avoid side forces, ensures strain relief for the plugs and allows the IT administrators to easily access the individual cables when patching. Also, the angled version of tSML accommodates the bending radiuses. In this way, the risk of falling below the bending radius is averted. The highest packing density can be integrated also on half a height unit thanks to the smart design. In total, the angled version of the new tSML module can include 48 LC-Duplex ports (96 fibres), 24 MPO/MTP ports (576 fibres) or 24 RJ45 ports. The tSML cabling system merely contains the module and trunk cables.

Equipped for the future

Now that the project is completed the project managers are entirely satisfied: "Working with tde was a trouble-free and constructive exchange. The plan convinced with its professionalism and the products with their excellent quality." tde is always available when questions or uncertainties arise. After the refitting the UKM is well equipped for the growing challenges of complexity and performance, which its data grid has to face. From now on, new server installations are implemented with little effort and in no time thanks to the tSML system. It is no longer necessary to lay bulky cables through the entire room of the data centre.

About the University Hospital Münster (UKM)

The University Hospital Münster (UKM) stands for high-end medicine in the field of German hospitals and ranks amongst the most successful maximum care hospitals throughout the country. Presently, the University Hospital has more than 1457 beds and more than 30 clinics as well as numerous institutes and centres. In 2013 the hospital treated approximately 58,000 in-patients and roughly 475,000 out-patients. With its 8700 employees the UKM group is one of the largest employers and training institutions in the region.

For more information visit www.ukmuenster.de