

CASE STUDY

SOUND BASIS FOR A LONG LIFE CYCLE: FHS UNIVERSITY CENTRE USES CLASS F_A CABLING SYSTEM FROM DATWYLER

In July 2013 FHS St. Gallen opened its new University Centre by the main station. The new building was equipped with cutting edge technology, including a high-performance Class F_A communications network from Datwyler.

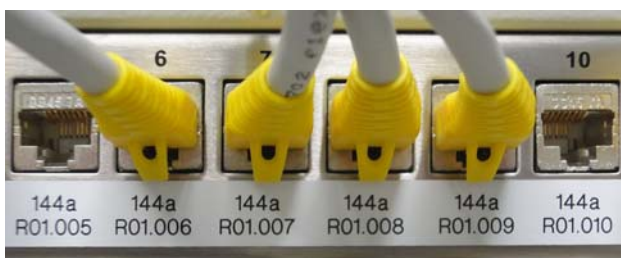
The FHS is a fast-growing university of applied sciences which now has around 3000 students. It sees itself as “a place where big ideas are born and nourished”. This is especially true of the central FHS block by the station. With around 15,000 square metres of floor space and an investment volume of well over 100 million Swiss francs, the University Centre is one of the largest new public buildings in eastern Switzerland.

Long service life

The university's teaching, research and services are enjoying the benefits of the new building, not least the cutting edge technology. This includes universal communications cabling (UCC) with extremely high performance components.

“My experience over the past 25 years has always been that a good foundation is essential for long service life”, explained Harald Pintarelli, Building Technology Facility Services at FHS. “With a view to the defined life cycle, which is between 25 and 30 years for the whole building, and a high level of investment protection, the Cantonal Building Department invited tenders for a Class F_A universal communications cabling system providing a standardised bandwidth of 1000 megahertz.”

A solution from Datwyler Cabling Solutions was selected. On the floors this comprises symmetrical CU 7150 4P copper data cable and type PS-GG45 connectors. Cables and connecting technology conform to Category 7_A up to 1000 megahertz.



They even support a maximum bandwidth of 1500 MHz, so provide extremely high reserve capacity for multimedia and future applications beyond 10 gigabit Ethernet.

Copper and fibre optic technology installation

Between January and December 2012 the telematics specialists at Huber+Monsch AG in St. Gallen installed some 125 kilometres of Datwyler copper data cable and 4400 modules. At the user end the connections were built into dado trunking, surface-mounted sockets or FLF floor boxes. On the floors of the building the horizontal cabling terminates at 120 patch panels.

For the backbone into the data centre the installers used approximately four kilometres of type FO Universal OM3 fibre optic cable with 24 and 48 fibres.

Datwyler also supplied a variety of safety cables, for example for the power supply to the smoke and heat extraction system and the fire service lift.

The new communications network, which has been in operation since January, not only provides the FHS with secure high-



speed data transmission, but also incorporates the IP telephones, audio systems, video beamers and WLAN. The WLAN access points take the power they need via the data cables (PoE, Power over Ethernet).

Trouble-free operation

The FHS is very satisfied with the Datwyler system. "The high quality specifications were all met", says Harald Pintarelli. "This applies to the materials used as well as to the careful routing, connection and measurement. In this respect the new network has been running without a single hitch right from the start."

Today extremely high-performance connections are available to users across the board. As the PS-GG45 modules are "downwardly compatible" with RJ45 connectors, they can connect all their devices with the current connectors.

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