

CASE STUDY

NATIONAL UNIVERSITY, SINGAPORE: FOR COLLABORATION AND INNOVATION

In the latest new building at the National University of Singapore, COM3, Comnet has installed an IT infrastructure solution from Datwyler.

For around fifty years the School of Computing (COM) at the National University of Singapore (NUS) has been one of the island state's intellectual centres for computer technology. COM3, a big new building for the School of Computing, will be opened shortly. It was conceived and designed as a symbolic bridge, not only to link the existing buildings COM1 and COM2 to the Smart Nation Cluster of the NUS, but also to strengthen contact between students, university members and visitors and thus promote collective working, research and innovation.

The new five storey block is located in a lush tropical valley. Natural light and plenty of fresh air in the building will promote openness to innovation. Green spaces have been designed as social meeting places, with the idea of facilitating collaboration and mutual inspiration. COM3 is a resource-saving building with a particularly super low energy requirement. This is why it was awarded the "Green Mark Platinum Award" by the Building Construction Authority of Singapore.

Close partnership

The contract for the IT infrastructure was awarded to Comnet Systems Pte Ltd. Comnet, a system integrator with over 25 years' experience, has already implemented many projects for the university. Once again it was the first choice for the NUS because of its value engineering and geographical proximity.

In the tender Comnet quoted for a futureproof solution from Datwyler which had been developed beforehand by both companies. Even after the award of contract Comnet and Datwyler continued to work hand in hand in order to find the ideal technical solution for every challenge – and, despite COVID-imposed restrictions,



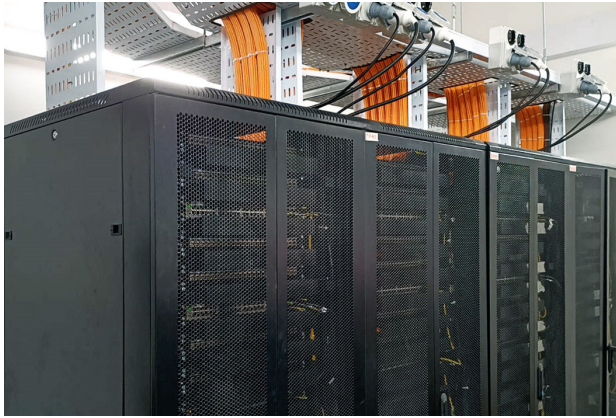
were able to complete the project before the scheduled opening of the campus at the end of 2022.

"We have been collaborating with Datwyler since 2007 and since then have supported each other whenever we could," explained Mark Lee, Managing Director and owner of Comnet. "In a project as important as the NUS one we again opted for Datwyler because of quality and strengths."

A look at performance

The Comnet contract included design, delivery and installation as well as testing and commissioning the building-wide IT infrastructure. Among other things it is designed to serve as a basis for e-sport, e-menus, the networking of IoT devices such as robots, and for security monitoring (CCTV).

2660 copper connection points were installed in COM3. A solution with Category 6A S/FTP cables from Datwyler was used for the floor cabling. Unlike an "only" foil shielded Cat. 6A solution, this provides an overall sheath of braided copper in addition. The result is high electro-



magnetic integrity and a better, i.e. more secure transmission performance by the IT infrastructure.

Two fibre optic backbones

There are also two fibre optic backbones: 8-fibre OM3 universal cables for the security network and 12-fibre reinforced single-mode cables for the IT network. These connect the central plant room with the distributor for the kitchen and the sub-distribution areas on the entire six levels.

(November 2022)