

Mercedes College Sets the Standard with 10G Copper and Pre-terminated Fiber Network Infrastructure from CommScope®

South Australian school connects new wing with **SYSTIMAX GigaSPEED® X10D**, **InstaPATCH® Plus** and **VisiPatch® 360** connectivity solutions



Mercedes College in Springfield, South Australia, is a Catholic co-educational school with 1,250 students. Through its progressive and internationally focused approach, it has grown steadily since opening in 1954. The latest phase of expansion at the College campus is the addition of a new wing that sets the standard in educational facilities.

Information technology is central to the design of the new building, allowing a flexible approach that delivers learning resources wherever students need them. To achieve this, a high performance network infrastructure has been installed throughout the classroom and administrative areas. As well as data and Voice-over-IP connections, the new infrastructure supports analogue video, audio and CCTV.

The choice of physical layer connectivity was vital in meeting the network performance requirements. The College wanted speed and reliability that would support high bandwidth educational systems - including powerful new systems that will be developed in the future. It already had 1Gb/s Category 5e SYSTIMAX PowerSUM cabling in its existing buildings. For the new wing, it wanted 10 Gb/s connectivity that fully conformed to Category 6A/Class E_A cabling standards.

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— Albert Sabadin,
IT Systems Manager
at Mercedes College

After considering the alternatives, the College decided on CommScope's SYSTIMAX® GigaSPEED X10D copper solution for horizontal network connections. This gives 10 Gb/s performance from end-to-end over a 100-meter, four-connector channel.

In addition to 10G transmission speeds, GigaSPEED X10D connections will also support PoE (Power-over-Ethernet). The installation at Mercedes College is one of the first such 10G, PoE systems in any Australian educational establishment.

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To meet transmission requirements in the network backbone, the College chose CommScope's SYSTIMAX InstaPATCH® Plus high density fiber solution. This is factory terminated, factory tested and modular, so installers can connect system components very quickly. Up to 96 fibers can be ready for service in the time it takes to make a single fiber connection with traditional systems.

The InstaPATCH Plus Solution, using laser optimized SYSTIMAX LazrSPEED® fiber, meets all the College's speed and capacity requirements for the present and future. It does this without the high cost electronics associated with single-mode fiber, and it also offers the option of using very high speed parallel transmission techniques.

To realize the full potential of its advanced network connectivity, the College needed an equally advanced system for managing connections. It met this need with the SYSTIMAX VisiPatch® 360 integrated patching and cable management system.

“We wanted a feeling of purposeful efficiency for the new wing,” said Albert Sabadin. “And this had to be more than skin deep – behind the scenes, the network infrastructure had to be fast, reliable and easily managed. The VisiPatch 360 Solution fits well with this concept.”

Using reverse connectors to route cords towards the back of the panel, the VisiPatch 360 system avoids the ‘patch cord spaghetti’ that plagues conventional panels. The clean layout and easily visible labelling makes moves, adds and changes much easier, saving time and avoiding errors.

In addition, the VisiPatch 360 System is compact and aesthetically pleasing. In a state-of-the-art educational facility, like the new wing at Mercedes College, both these factors are a priority.

Installation of the new network was completed by CommScope BusinessPartner, BJM Data Cabling, based in Kent Town, South Australia. The BJM team connected 400 outlets via 20,000 meters of GigaSPEED X10D cabling carried in overhead trays. It also installed 150 meters of InstaPATCH Plus fiber in the backbone, linking the telecommunications room in the new wing with the central campus distributor.

The new infrastructure is covered by the same 20-year warranty and application assurances as the College's existing SYSTIMAX PowerSUM cabling. CommScope guarantees that the whole installation, from end-to-end, will perform to specifications and support network applications that conform to international standards.

“The education sector is looking for greater performance from the network physical layer to support more network intensive learning applications,” said Reginald Evans, Regional Sales director, SEAP CommScope Enterprise Solutions Australia. “But, schools and colleges must also have guaranteed reliability and compatibility – students cannot be left without information and software that is essential to their studies. The CommScope installation at Mercedes College illustrates how CommScope can deliver - and guarantee - the highest levels of end-to-end performance in an educational environment.”



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