

# Case Study

## Park Community School

**Customer** Park Community School

**Location** Havant, Hampshire

**Requirements** Provide a new cabling and fibre infrastructure for a complete refurbished building.

**Equipment** Excel Category 6 UTP, Excel Fibre and Environ Racks

**Customer's View**

*Our students learning enrichment and access to a first class network were the priorities for this project. The way in which Easy Networks worked kept disruption to a minimum and the resulting network offers our students quick and reliable access to facilities throughout site.*

*Phil Warren, IT Manager, Park Community School*



Park Community School is more than an institution of education. The school provides other facilities such as enterprise experience in their industrial unit and horticulture in their small holding, providing a broader curriculum to their students.

The school has just under 900 students, age range 11-16. Most qualifications studied are GCSE's with alternative qualifications to give students a variety. They also have a pastoral system in place to encourage personal development and democratic values.

### The Requirement

Due to the complete refurbishment of the school it was necessary to replace their existing infrastructure which consisted of Category 5e and OM1 fibre. They wanted to upgrade to a Category 6 and OM4 installation.

The Local Education Authority (LEA) originally specified an alternative infrastructure solution, Category 6 copper and OM1 fibre backbone to multiple blocks and cabinets.

### Sourcing a Partner

Established in 1991, Easy Networks a leading provider of data networks and AV solutions for SME, large enterprise and education has extensive experience and expertise in high quality LAN infrastructure. With such experience and knowledge, a large number of Local Education Authorities have in Hampshire and surrounding counties appointed Easy Networks to deliver their high quality networks.

Easy Networks created an implementation plan to minimise disruption whilst working on the project at Park Community School. This was essential as it enabled the school to continue with their day to day business with minimal disturbance.



Easy Networks advised Park Community School to upgrade from OM1 to OM4 to improve the fibre backbone performance and they recommended Excel as a solution. With its proven track record, its technical capability which is supported by independent third party verification from Delta and the fact that it is backed by a 25 year warranty, meant that Excel could match on quality and warranty as opposed to the alternate solution suggested by the LEA. On this basis the decision to install Excel was made.

Easy Networks is an authorised Excel Cabling Partner and has undergone regular technical training and, as a result, is able to offer the 25 year warranty on all of its installations.

## The Solution

The old system was a mixture of Category 5 and Category 5e with OM1 fibre. It was not documented and labelling was an issue. Easy Networks ensured the new system was fully documented, tested, warrantied and labelled. Allowing for future additions, moves and changes, creating a far more manageable process.

Excel Category 6 UTP cable was chosen for its optimal support of high speed data protocols delivering 1 Gbps performance to the workstation. Excel Category 6 panels have been designed to meet or exceed the latest ISO and TIA requirements for Category 6 compliance. Excel Category 6 panels also come with rear management as standard. This small but important feature offers great benefits to the overall quality of a network installation, the unit allows for the cables to have a uniform and smooth bend radius, aiding the system to give the best possible performance.

Nowadays installations need to provide not only data, but power as well in the form of PoE. Utilising the Excel Category 6 cabling allows for the end user to utilise PoE, whilst still delivering Gigabit Ethernet. This makes the network perfect for taking on IoT deployments, where it can be used for wireless access points, IP access control, alarms and IP CCTV, helping the school to become more of an intelligent building.

Excel CR Racks were chosen to house all the equipment. Four black 42U 600 x 600 racks and three 42U 600 x 1000 were used, each fitted with a glass front door. These were ideal for cable entry in the roof and base and accommodated a load of up to 600 kg. Within the racks two Excel power distribution units were installed with up to 12 sockets per unit giving service for all required switch and server equipment.

Excel 12 core OM4 loose tube optical fibre cable, panels, patch leads and connectors were installed to provide the fibre optic backbone of the network. The installation took place over several floors, and buildings. These were linked together by 12 Core OM4 Tight Buffered fibre optic cables.

The choice of OM4 fibre was perfect for the installation as it delivers up to 1 Gigabit of Ethernet up to 1100 metres, as well as offering future proofing as it is capable of delivering 10 Gigabit over 500 meters, and even 100 Gigabit up to 150 metres, making it more than adequate for linking the network together, today and well into the future when needed.

The choice was made to fusion splice connectors on to the fibre links. This type of termination is the best possible in the field, and ensures the best test and operating performance.

## The Result

The installation took place in spring of 2014 during which the school had to remain fully operational from a network perspective while all refurbishment works and new build works were completed. Easy Networks executed a proactive approach where temporary fibre and copper was fitted throughout the project to ensure the school could operate with no disruption.

Park Community School now has a network infrastructure which allows the school to fully support their students with the use of wide range of electronic devices they need to assist with their learning and to enrich their time at school.



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