Case Study Fakeeh University Hospital

Customer	Gulf Business Machine Dubai	
Location	Dubai Silicon Oasis	
Requirements	Fakeeh University Hospital, a sprawling medical facility in Dubai, needed a state-of-the-art IT infrastructure to connect four buildings, support 700,000+ patients, and deliver data-driven healthcare.	
Equipment	 Excel Category 6A F/FTP Cable – 100-196 – 375KM 7000 Excel Category 6a Data Outlets Enbeam OM4 Fibre Connectivity 35 Environ ER Series IDF Perforated Cabinets 25 Environ SR Series Data Centre Server Cabinets 105+ Excel Intelligent PDUs 	exce

Fakeeh Care is one of the leading healthcare providers in Saudi Arabia and they own Fakeeh University Hospital and medical University. It's an impressive facility and spans across a one million square foot site with four interconnected buildings. The hospital has a capacity of 350 beds and over 700,000 patients are treated each year. As well as a Medical University, there are 55 clinics providing healthcare. Like other industries, there is an increasing reliance of technology and data-driven systems in healthcare and Fakeeh University Hospital needed a cutting-edge IT infrastructure with all buildings in on the site connected via fibre.

Choosing the Right Partner

Gulf Business Machines (GBM) is one of the leading IT systems integrators and digital solutions provider in UAE and Gulf Region. GBM is an Excel Accredited Partner and has some of the biggest IT projects of the region to its name. Their IT credentials and overall competitiveness were vital to secure the job. They were looking for a product that can comply to the project specifications of the hospital, has healthcare industry experience, local presence and stock holding within Dubai. Excel was the perfect fit to check all these boxes.

One of the key requirements from the IT consultant was that the full end-to-end structured cabling system must be supplied from a single manufacturer covered by a single warranty. Excel was able to offer a Shielded Category 6A F/FTP Solution, along with OM4 Multimode Fibre as well as Equipment and Data Centre grade Server Racks all from under one roof. For the monitoring of IT equipment inside cabinets, Intelligent PDUs with environmental monitoring such as humidity and temperature were required and could also be supplied by Excel. The Excel solution was the obvious option for these reasons, and the full system – including the cabinets – was covered by Excel's comprehensive 25 year warranty. The installer, IT consultant and the End User were all confident that Excel was suitable for



this project, and it was supported by Excel's accolades across a spectrum of verticals, including healthcare.

The Installation

The project required a complete cabling solution consisting of copper, fibre, cabinets and PDUs. A total of 7,000 CAT6A Data Outlets had to be deployed throughout the facilities in line with the project design drawings and specifications. To achieve connectivity, 375 kilometers of Cat6A S-Foil Shielded Cabling (100-196 - F/FTP Cable) was installed linking the outlets to their corresponding Intermediate Distribution Frames (IDFs). A total of 35 IDFs are located across the Four Buildings of the Hospital, which have been interlinked through Multimode OM4 fibre cabling to ensure robust and efficient high speed, 10G Communication.

The infrastructure inside the IDFs has been equipped with 35 Perforated Environ ER Series Cabinets, providing an organized and secure housing for the network components. The hospital also has a 25-Cabinet Data Centre boasting Excel's Environ SR Series Server Racks with perforated doors. Each rack is equipped with Excel's Intelligent Power Distribution Units (PDUs), enabling remote monitoring and control of power usage. These PDUs monitor and issue notifications for alarms and events that may require the attention of IT personnel, ensuring proactive management. Environmental monitoring systems featuring Temperature and Humidity Sensors have also been installed in cabinets. This will further enhance the reliability and longevity of the installed equipment.

The Result

The installation of Excel's solution has resulted a cuttingedge cabling infrastructure for the iconic Fakeeh University Hospital. The Excel Solution ensures seamless communication and improved network connectivity and data transmission for the hospital. This implementation plays a pivotal role in optimising the Hospital's day-to-day operations, leading to a more efficient and streamlined environment, contributing towards a high-quality healthcare service for its patients.

After the installation, Karuppiah.K from GMB said: "We have great appreciation for the invaluable contribution and support extended by Excel that made the successful delivery of the Fakeeh University Hospital possible. It is worthy to mention that Excel's Cabling Solution fully met and, in some areas, even exceeded the requirements outlined in the Consultant Specification, making them our vendor of choice, and contributing significantly to the project's success. We also applaud Excel's ability to offer a full end-to-end system from a single manufacturer which made it easier for us to ensure seamless integration and optimized our overall efficiency.

Excel's comprehensive solution, covering everything from Copper and Fibre to Cabinets and PDUs, has undoubtedly set a new benchmark for excellence in providing a holistic and unified system."

The end user was also happy with the results as Jacob Sam from Fakeeh University Hospital added: "We are pleased to share that the Excel Structured Cabling System has been performing exceptionally well, and we are highly satisfied with its quality and performance. The system's seamless integration and efficient design have significantly improved our network connectivity and data transmission capabilities.

The Excel Structured Cabling System has undoubtedly enhanced our hospital's network infrastructure, ensuring uninterrupted communication and data flow critical for our daily operations. We have received positive feedback from



our staff regarding the system's reliability and ease of use. We would highly recommend your products and services to other organisations looking to improve their network infrastructure."

Excel House Junction Six Industrial Park Electric Avenue Birmingham B6 7JJ England

T: +44 (0) 121 326 7557 **F:** +44 (0) 121 327 1537 **E:** sales@excel-networking.com

www.excel-networking.com

Mayflex MEA DMCC Office 22A/B AU (Gold) Tower Cluster I Jumeirah Lake Towers (JLT) Dubai United Arab Emirates PO Box 293695

T:+971 4 421 4352 F:+971 4 421 5814 E: mea_sales@mayflex.com

