



Gate Avenue: Building management between finance, art and consumption

Dubai International Financial Centre, DIFC, is a leading global financial centre in the Middle East, Africa, and South Asia (MEASA) region. It even has its own district in the Arab metropolis, with office and residential complexes and hotels. It has also recently gained its own retail and lifestyle destination: the Gate Avenue. SAUTER is the team behind the building and energy management for this high-class promenade.

More than 25,000 people from over 2,500 companies work for the region's largest and comprehensive financial centre ecosystem. Gate Avenue is almost a kilometre long. It stretches from the large business area in the north – where the eponymous Gate Building is situated – to the residential and business districts in the south. It combines working with living, a connection point linking the entire district.

The Avenue comprises four zones interconnected by a vast open-air promenade. This giant expanse is home to numerous exclusive shops, gourmet restaurants, and renowned art galleries. Over 300 leading retail, lifestyle concepts, art, fashion and food & beverage brands spread over several buildings, reside in the centre to date. This, however, marks just the beginning – by 2024 the Gate Avenue will cover an area in excess of 60,000 square metres.

Yet the most impressive figure is comparatively small: the success story of the Dubai International Financial Centre was born a mere 16 years ago, with construction work on the promenade starting in late 2016. This exemplifies the enormous dynamism and ambition of the project, setting a new milestone with Gate Avenue. It has turned a business district into a bustling meeting place and hip lifestyle location – attracting people not only from all over Dubai but far beyond as well.



Many buildings – one partner

With four zones, different building types, and outdoor facilities, Gate Avenue's complex terrain is a major challenge for building management. SAUTER, however, was happy to pick up the gauntlet and draw on its experience in similar large-scale projects. In Dubai alone, it had already been involved in Al Habtoor City, Souk Warsan, Marina Gate Towers, Signature Towers, Multiple Towers from EMAAR at Dubai Creek Harbour and Downtown- Burj Khalifa area.

All these projects, including Gate Avenue, had one thing in common: the central software solution had to cater for several buildings with different tenants and areas with wide-ranging uses. SAUTER Vision Center is the control centre – a modern management software package with graphical user interface providing the operator with all the building functions and data.

At operational level, automation stations control and monitor the entire technical building equipment. These include ventilation and air-conditioning systems, cold water, domestic hot water and sump pumps, main distribution units and automatic transmission switches, etc. There are also smoke extraction fans and pressure ventilation systems for fire protection. The stations communicate with numerous field devices – temperature and humidity sensors, differential pressure sensors, differential pressure switches, carbon dioxide sensors, valves, control units and so on. Communication between field devices, automation stations and the management and operating level takes place courtesy of BACnet/IP.

SAUTER is a single-source supplier. It has, however, integrated third-party systems in the building management solution – fire alarm and lighting control systems, escalators, lifts, generators and central battery systems – with BACnet/IP, Modbus/IP and RS-485 deployed as applicable.

Energy monitoring with SAP integration

Alongside building management, SAUTER has also developed the energy monitoring system (EMS) for Gate Avenue. The entire energy consumption of each building and tenant is combined and managed centrally. Heating, water, gas and electricity meter readings are performed using Modbus and M-Bus protocols.

The API automatically sends a monthly consumption report to the financial centre's SAP system. This is then forwarded to tenants. If there are additional meters and tenants, new licences are issued to scale the energy management system as needed. Further meter hardware can be added to the existing network and connected without difficulty to the EMS system.

And even when the system is completed, SAUTER's joint partnership will not end there. The reason for this is that a comprehensive 5-year maintenance contract has already been agreed.

