Case study

Airport Focus - Securing The Future

Background

With today's heightened focus on airport security, communication and security managers are under increasing pressure to add new services and to extend current systems, either on existing infrastructure or on limited new transmission media, normally through cables that are already heavily oversubscribed.

Airport security systems typically comprise thousands of cameras, and countless access control and intruder detection systems distributed between numerous buildings spread over a huge area. The challenge lies in how to monitor, man and control such a vast system on a 24/7 basis so that the various agencies are able to share information seamlessly. And, with growth in air travel expected to soar over the next 30 years and beyond, there is a real need to install a system that is designed to keep pace with future expansion plans.

Our Solution - ASFOM's Role

A recent airport project that KBC was involved with was based on a design similar to the early, cellular telephone systems. That is, it was designed around lots of small systems, collectively working as one.

Each site within the airport has its own cross-point matrix switch and its own control room as well as locally installed digital video recorders, capable of handling broadcast quality video. The system is also centrally monitored - which is no mean feat when you consider the number of cameras on site. To achieve this, each analogue system is connected via multiple 'tie lines' also with low-speed data (RS422, RS485,RS232) and an IP connection to allow access from central control to the digital video recorders. In addition, the system carries the access control system and, in some cases, building management data.

The project required connectivity over two fibers in a mission critical situation. This is provided by KBC ASFOM (Application Specific Fiber Optic Modem) equipment which allowed the client to effectively design their own product configuration. The ASFOM solution enables multiple channels of real-time, high-quality video; uncompressed video; 100Mbps IP and a number of data channels of (for access control, CCTV control and remote control) to be directly connected allowing the minimum of fiber to be used.

Flexible ASFOM Solutions

Over the last few years, ASFOM's flexible solutions have been applied to a number of major airport projects across the globe within systems as diverse as perimeter fence monitoring to barrier access control. Its incredible flexibility allows virtually any requirement to be met using a standard product and because the range is fully ruggedised, with a temperature range of -40°C to +70°C, the equipment operates in the harshest of environments.

And the airport in question? For security reasons we are unable to mention the name however, in the months following the installation, the client reports that the system has operated flawlessly and, as predicted, has continued to expand.