



Civil Aviation Department Selects AP Sensing for Airport Facility

Hong Kong

To address the future growth of the air traffic industry in Hong Kong, the Civil Aviation Department (CAD) constructed new headquarters. The five individual buildings cover approximately 65,000 m² and are designed to accommodate the CAD functional divisions, the Air Traffic Control Centre (ATCC) and the antenna farm. The entire construction process is designed for future growth, efficiency and modern energy-saving ecology. Thus, AP Sensing was selected for our technologically advanced monitoring of the facilities using three Linear Heat Detection (LHD) units to cover the five buildings, with a total cable distance of approximately four kilometers.

Any fire has the potential for devastating consequences to human life as well as a company's assets. AP Sensing's LHD system offers unparalleled advantages over both conventional fire detection and other fiber optic monitoring solutions. This includes a system that withstands severe conditions while providing fast detection, with the industry's lowest false alarm rate. The system is fully integrable with other tools and fire suppression systems; due to its linearity, thousands of temperatures are measured in real-time, pinpointing any hotspot or fire with complete accuracy.



Construction underway in Hong Kong

Sensor Cable

A single cable can be divided into 256 zones, and each zone can be individually configured based on alarm thresholds and reactions. For example, maximum temperature, gradient temperature, or a combinations of both can be defined for each zone.

System Capabilities

AP Sensing's solution combines the ability to locate an alarm situation, determine the size of a fire and the direction it is spreading, and provide this information continuously in real-time, both during detection and to help guide firefighting efforts. Our fiber optic-based LHD technology has the industry's most complete set of certifications, which helped obtain special approval from the Hong Kong fire security department to use LHD instead of an expensive fire suppression system.



Conception of finished CAD Development Project

Future-proof and Ecological

The campus features 140 m² of photovoltaic panels, six solar lighting collectors with a fiber optic solar tracking system, rainwater collection, vertical greening and green roof initiatives. AP Sensing's LHD units are installed inside the raised floor and replace the sprinkler system. The maintenance-free system provides continuous real-time monitoring throughout the entire plant, and is immune to dust, dirt, humidity and electro-magnetic interference (EMI). All monitoring information is available to the firefighting personnel, and no other fire detection system can continue to operate and withstand temperatures up to 750 °C, tested as per IEC 60331-25.