Large Parking Garage Heat Detection

Europort II is a 75,000 square meter parking terminal and distribution center for new cars on their way to dealerships. Protecting this valuable asset, and its contents, requires an efficient and effective fire detection system.

The Requirements

The harsh environment – in many aspects comparable to a traffic tunnel – and the value expectations of the operator led to following key requirements:

• Permanently withstand an operational temperature range from -20°C to +40°C
• Low total cost of ownership
• Robust sensors that will survive the harsh environment for a lifetime with no maintenance
• Highly reduced number of active components
• EN 54-5 Class A1 certified linear heat detection system
Fiber Optic Linear Heat Detection

A fiber optic linear heat detection system exceeds these challenging requirements. The heat sensor is a passive fiber optical cable. The sensor cable itself requires no maintenance and operates without any electrical components.

The Solution

AP Sensing’s partner (Tyco) developed a solution utilizing 6 AP Sensing Linear Heat Series instruments. They connect to a central fire panel, each independently serving one story of the terminal building:

The flexible configuration options of the AP Sensing Linear Heat Series instruments allowed operators to quickly and easily define 7 independent alarm sections in line with the fire doors installed on each level of the parking garage.
Sensor Cable

Tyco selected the light and easy to install “Safety” sensor cable. Its compact design (d=4mm / 17kg/km) ensures fast heat detection.

It is easy to install, which reduces the overall mounting/installation costs. The sensor cable, together with AP Sensing’s Linear Heat Series, is VdS certified (EN 54-5, Class A1).