



Sentio[®]

Early fire detection in railway stations



SENTIO® – MAIN FEATURES

- **Fire detection at an early stage**
Using highly advanced Multiple Gas Detection (MGD) technology
- **Suppresses possible disturbances**
Diesel train exhaust fumes can be suppressed with intelligent system techniques
- **Designed for tough environments**
Robust design withstanding dust, humidity, vibration, exhaust fumes, temperature changes, etc
- **Intelligent surveillance**
Self-monitoring system Centrally controlled
- **Unique patented Fire CPSS™ functionality**
Provides Fire Classification, Position, Severity and Spread

SENTIO® – THE CONCEPT

The sooner you detect a fire – the easier it is to minimise the consequences!

The Sentio® sensors are installed in railway stations and connected through an advanced redundant network. If a sensor detects an incident, a detailed alarm will be given to the control centre. The alarm provides information about the fire location and spread. At the same time, automatic actions can be initiated by the Sentio® system. Operators in the control centre can simultaneously use the information from the Sentio® system to quickly assess the situation and make decisions on how to act.

The Sentio® system provides high safety for tough environments such as railway stations. Due to its robust design and intelligent technique, it effectively minimises the risk of false alarms.



SENTIO® – MGD TECHNOLOGY

Early fire detection

Multiple Gas Detection (MGD) technology, originally developed for aerospace, is based on the detection of fire related gases.

Smoke detection and camera surveillance are examples of commonly used protection solutions. These are however not efficient in detecting the early stage of a fire, which is the release of gases.

A Sentio® sensor can be described as an “electronic nose”. Through intelligent analysis, the sensor can identify different types of fires such as for example burning cables. It can also suppress “known disturbances” such as for example diesel train exhaust fumes.

SAFER UNDERGROUND

In 2001, Firefly started to test the MGD technology in the Stockholm subway in co-operation with the subway network owner AB Storstockholms Lokaltrafik (SL). The objective was to verify that this entirely new type of detection principle can be used in tough, dirty underground environments to detect fire at an early stage.


In December 2006, after a test period and comparisons with conventional fire detection systems, SL decided to equip its entire underground subway network with the Sentio® system. It protects a total of 56 underground stations and their connecting tunnels of about 80 kilometres.

In December 2009, a Sentio® pilot system was installed in one of Europe’s largest railway systems.



SENTIO® – A PART OF FIREFLY AB

Firefly is the world's leading supplier of fire and explosion protection systems for the process industries. With innovative solutions, high quality products and outstanding service, Firefly has served its customers over 40 years. The unique Firefly techniques have proven to be the most effective in preventing fire and dust explosions in the tough industrial environments of the process industries. Up to today, Firefly has delivered more than 6.000 protection systems worldwide.



Firefly AB
Phone +46 8 449 25 00, Fax +46 8 449 25 01
sentio@firefly.se www.sentiobyfirefly.se

