



# SMOKE & HEAT DETECTORS - INTELLIGENT DISCOVERY DETECTORS

## DESCRIPTION

Discovery® is a range of high-specification, analogue addressable fire detectors and alarm devices. Discovery detectors offer effective false alarm management by a combination of EN 54 approved operating modes and sophisticated algorithms.

Drift compensation further reduces the likelihood of false alarms caused by a build-up of dust in the sensing chamber.

In addition to the familiar smoke and heat detectors, the Discovery range features two multi-sensor detectors. One is an optical/heat multi-sensor which can be used to protect against many types of fire risk. The other is a carbon monoxide/heat multi-sensor which protects against both smouldering fires and those generating heat.



### OPTICAL SMOKE DETECTOR

The Discovery optical smoke detector is suitable for slow burning or smouldering fires and should be positioned where these are most likely to occur. They can be set to a sensitivity mode best suited for the application.



### IONISATION SMOKE DETECTOR

Ionisation detectors use a low activity radioactive foil to detect fires by irradiating the air in the smoke chambers and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm. It is a good general purpose detector that responds well to fast burning, flaming fires.



### HEAT DETECTOR

The Discovery heat detector, distinguishable by the low airflow resistant case, uses a single thermistor to sense the air temperature around the detector. This type of detector is particularly useful where the environment is dirty or smokey under normal conditions.



### MULTI-SENSOR DETECTOR

The Discovery multi-sensor detector comprises optical smoke and thermistor temperature sensors whose outputs are combined to give the final analogue value. As a result, the multi-sensor is useful over a wide range of applications and is highly immune to false alarms.



### CARBON MONOXIDE (CO) DETECTOR

The Discovery CO fire detector is good at detecting deep-seated fires. See the chart below for information on typical applications. Please note CO detectors do not detect smoke particles or heat and are not universal replacements for smoke detectors.

## KEY FEATURES

- Five approved response modes for ease of optimisation to different environments
- Rejection of transient signals
- Drift compensation to ensure constant sensitivity
- 360° visibility in alarm
- Flashing LED option
- Alarm flag for fast alarm reporting
- Four bytes of non-volatile memory for user data
- Compatible with XP95® systems

## APPROVALS

- The Discovery range of detectors and bases are approved by a large number of certification bodies. These include
  - EN 54-3, EN 54-5, EN 54-7, EN 54-11, EN 54-17, EN 54-23, CPD, CPR, LPCB, VdS, AFNOR, BOSEC, FG, SBSC, SIL, VNIPO and others.
- Discovery is also approved to both North American (UL, FM) and marine standards.
- Discovery complies with the requirements of a number of European New Approach Directives such as the EMC Directive 2004/108/EC, the Construction Products Directive 89/106/EEC and Construction Products Regulation 305/2011.



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Discovery is a range of high-specification, intelligent fire detectors developed to meet the requirements of sophisticated systems while providing engineers with an additional dimension in fire protection capability. Discovery gives you total reassurance in installations where adaptability to changing conditions and protection against unwanted alarms are paramount.

## XPERT CARD AND BASE

The XPERT card is a unique, patented addressing method whereby the address is set by simply removing the 'pips' on the card according to a chart supplied with the base. The coded card is then inserted into the side of the base where it locks into position. The XPERT card simplifies and speeds up the installation and commissioning.



## SENSITIVITY SELECTION

Each Detector in the Discovery range can operate in one of five response modes, which can be selected from the control panel. The response characteristics of the detectors have been carefully set so that the detectors will comply with the requirements of the relevant part of EN54 in all response modes. Mode selection depends on application - Mode 1 will give a higher sensitivity to fire than Mode 5.

## DRIFT COMPENSATION

All Discovery smoke detectors include compensation for sensor drift caused, for example, by dust in the chamber, and will hold the sensitivity at a constant level even with severe chamber combination.

## COMPATIBLE PRODUCTS

A full range of interfaces, sounders, beacons, sounder beacons, designed for use with intelligent systems is available from Technoswitch.

Product Code	Product Description
AP-DIS-O	Discovery Optical Smoke Detector
AP-DIS-H	Discovery Heat Detector
AP-DIS-I	Discovery Ionisation Smoke Detector
AP-DIS-MS	Discovery Multi-sensor Detector

Product Code	Product Description
AP-DIS-CO	Discovery Carbon Monoxide Fire Detector
AP-DIS-COH	Discovery Carbon Monoxide / Heat Multi-sensor
AP-XP-B	Mounting Base
AP-XP-AT	XP95 Blank XPERT Card

### Disclaimer

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