

# Discovery Ionisation Smoke Detector

*For Discovery Protocol Analogue Addressable Control Panels*



## Key Features

- ◆ Ideal for use with Control Equipment's Discovery and Voyager analogue addressable control panels
- ◆ Designed to meet approvals world-wide
- ◆ Five sensitivity bands for different environmental conditions or varying usages at different times of the day or week
- ◆ Drift compensation to ensure the reported analogue count is not affected by extraneous factors such as contamination
- ◆ Dual LED indication for all round visibility
- ◆ Flashing LED in standby indicating that the detector is being polled
- ◆ Automatic addressing with the patented XPERT card
- ◆ Electronics-free base
- ◆ Ease of installation
- ◆ Elegant design and a sleek shape - pure white polycarbonate finish

From the UK's leading control panel manufacturer





## Introduction

The Discovery detector range comprises of ionisation and optical smoke detectors, a heat detector and a multi-sensor detector, all with enhanced performance, high reliability and elegant shape. Discovery takes the advanced features of XP95 and adds new dimensions of sophistication. The protocol ensures adaptability and flexibility to changing conditions and enhanced protection against unwanted alarms.

The Discovery ionisation detector has a moulded white polycarbonate case with wind-resistant smoke inlets. The ionisation chamber consists of a reference chamber contained inside a smoke chamber. The outer smoke chamber has inlet apertures fitted with insect resistant mesh. The radioactive source holder and the smoke chamber form positive and negative electrodes respectively.

When smoke particles enter the ionisation chamber, ions become attached to them. This causes the current flowing through the chamber to decrease. As the current decreases, the voltage increases. The voltage is measured and an analogue signal is converted to digital for transmission to the control equipment. Pre-alarm or fire alarm is instigated by the micro-processor when smoke density increases to pre-set levels.

## Technical Specifications

<b>Size of Detector:</b>	42mm high x 100mm diameter
<b>Size of Detector in Base:</b>	50mm high x 100mm diameter
<b>Supply Voltage:</b>	14-28V DC
<b>Quiescent Current:</b>	500 $\mu$ A average, 750 $\mu$ A peak
<b>Alarm Current:</b>	3.5mA
<b>Alarm Indication:</b>	2 Red LEDs

## Part Numbers

<b>2501/270</b>	Discovery Ionisation Smoke Detector (5800-500)
<b>2501/020</b>	XP95 Detector base (45681-210)

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Control Equipment Ltd, Hillcrest Business Park, Cinderbank, Dudley, West Midlands, DY2 9AP, United Kingdom

Phone: +44 (0)1384 458651 Fax: +44 (0)1384 458972  
Email: [celsales@controlequipment.co.uk](mailto:celsales@controlequipment.co.uk) Website: [www.controlequipment.com](http://www.controlequipment.com)

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