

Optical beam smoke detection  
from Autronica Fire and Security

# So much space. We'll cover it!

Optical beam smoke detectors are the wide area smoke detection technology of choice, offering both excellent detection and value for money. With a high area of coverage per unit (as high as 1800 m<sup>2</sup> for some units), optical beam smoke detectors also offer more simplified wiring, installation and maintenance than other detection types. As a result, optical beam smoke detectors are the best solution for wide area coverage.

## How does it work?

An optical beam smoke detector works on the principle of obscuration. The beam detector sends out an invisible infra-red (IR) beam of light that the receiver measures. The presence of smoke **obscures**, or blocks, the light detected by the receiver, lowering its signal. When enough smoke is in the air, the infra-red (IR) light level will drop below a set level, which then triggers an alarm signal.



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United Technologies

Protecting life, environment and property

For open areas with high ceilings  
Auditoriums, warehouses, air-  
ports and historical buildings.

# Fireray® 3000

End-to-end infra-red optical beam smoke detector.



With its easy First-Fix system, and knockout features, Fireray® allows for both ease of wiring and quick alignment. The Fireray® 3000 is our solution to the most technical and challenging of installation environments. The system uses a paired set of transmitter/receiver heads to cover the protected area. The unit emits a narrow beam of infra-red (IR) light in order to monitor smoke and is controlled using a compact low level controller. Both detector heads (transmitter and receiver) have integral thumbwheels for ease of alignment. Using these thumbwheels provides a smooth and repeatable alignment process.

This model has been designed so that it can be installed and commissioned by a single operator. It also incorporates a visible laser as an alignment aid, with alignment LEDs offering visual feedback. The system is fully customisable, with both the alarm thresholds (sensitivity) and delay to Alarm/Fault being controlled from the low level controller.

Flexible

Easy installation

Precise

Cost effective

Customisable

Reliable

Easy to use

# Fireray® 5000

Motorised reflective, auto aligning infra-red optical beam smoke detector.

The Fireray® 5000 is one of the most advanced fire detection products in the world, combining a transmitter/receiver in the same detector head with an automatic alignment motor. This combination allows for quick, simple installation and requires wiring and power at only one side (the opposite side is covered by a reflector).

The Fireray® 5000 beam automatically compensates for environmental effects on the beam signal, keeping the unit in the best possible working order.

Other installation aids include the detector and controller First-Fix systems, as well as a visible laser to aid the user in alignment which allows the reflective prism to be positioned quickly and with confidence. This device can be installed and commissioned by a single engineer, thus offering further saving on installation and commissioning costs.



Contact us today for more information,  
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