



SMARTTM
Self-optimising
Multi-criteria
Alarm
Recognition
Technology



 **NOTIFIER**[®]
by Honeywell

Notifier by Honeywell: SMART Detection

SMART Detection

The Ultimate in False Alarm Technology...

...Make the SMART choice



How much would a false alarm cost your business?

False alarms from fire detection systems are not only a nuisance but can have significant financial implications. Not only are valuable man hours lost, in many cases the financial implications can reach far wider. A nuisance false alarm could, for example, mean reimbursing disgruntled hotel guests, an unplanned stoppage to a production line, or a significant loss of trade should a shopping centre be evacuated on the run up to Christmas.

To help overcome these issues NOTIFIER takes a systems approach, integrating our state-of-the-art detection and control technologies to create an optimised system combining stability and early warning capability.

Notifier by Honeywell: SMART Detection



SMART³

Unrivalled Technology and Performance

Improvement in speed and reliability of detecting fires and the reduction of false alarm rates has been one of the primary drivers for the smoke detector manufacturing industry for some years.

SMART³ the new technology and performance detector from Notifier by Honeywell utilises optical smoke sensing in conjunction with heat sensors, infra-red flame sensing technology and sophisticated alarm algorithms to offer a fast response to flaming fires while providing superior false alarm immunity.

With a powerful on board processor, SMART³ is also capable of detecting causes of false alarms such as welding and steel cutting. With the infra-red sensor 'seeing' into the protected space, SMART³ does not need to rely on actual flames producing enough heat for the sensor to activate an alarm. This reduction in reaction time gains vital minutes in preventing the spread of any fire.

The ionisation detector was initially introduced to be an extremely effective device for the rapid detection of fast developing flaming fires. If it were not for the environmental

pressure and increasing legislation surrounding the use of radioactive material in smoke detectors, it would continue to occupy an important place in the fire detection armoury.

The SMART³ detector removes these environmental barriers and provides a powerful alternative to the ionisation technology without a reduction in service. The intelligence within the SMART³ sensor has stemmed from the science of the optical thermal detector and the optical smoke detector; both universally acknowledged fire detection sensors of their day.

The Notifier by Honeywell SMART³ detector is the latest in detector science; providing the end-user the performance and peace of mind we have come to expect. This combined with today's acknowledged environmental tensions make the SMART³ detector a SMART choice.



Notifier by Honeywell: SMART Detection



SMART⁴

The Ultimate in False Alarm Management

The UK fire brigade respond to over a quarter of a million false alarms from automatic fire alarm systems each year. In 2005 this constituted 65% of all fire false alarms.* This is not only a cost to government but also a cost to the whole of the economy with businesses losing millions in revenue. Examples include:

- Delayed or cancelled flights
- Accommodation refunds
- Stop and restart of production processes
- Missed transactions and opportunities

The SMART⁴ (Self optimising, Multi-criteria, Alarm, Recognition, Technology) is a unique fire sensor that incorporates four different sensing technologies combined with sophisticated algorithms to provide the earliest warning of a real fire while giving the best of false alarm immunity. Containing an infra-red flame sensor, carbon monoxide gas sensor, heat sensor and advanced optical smoke sensor, the SMART⁴ sensor 'looks, smells and feels' the environment and 'thinks' before acting.

There is no smoke without fire

Fires occur when there is an ignition source, fuel, and oxygen. Common to all fires is the fact that they produce particulate, heat and carbon monoxide and, when a flame is produced, a light signature.

Optical sensors operate on a principle of how much airborne particulate is present. Airborne particulate is present in small amounts at all times in the form of dust, which can be increased suddenly when maintenance activities take place. Particulates

are also produced as steam from a shower or aerosol use. None of these activities produce heat, carbon monoxide or flame. It is using these fundamental principles that enables SMART⁴ to make the most intelligent decisions.

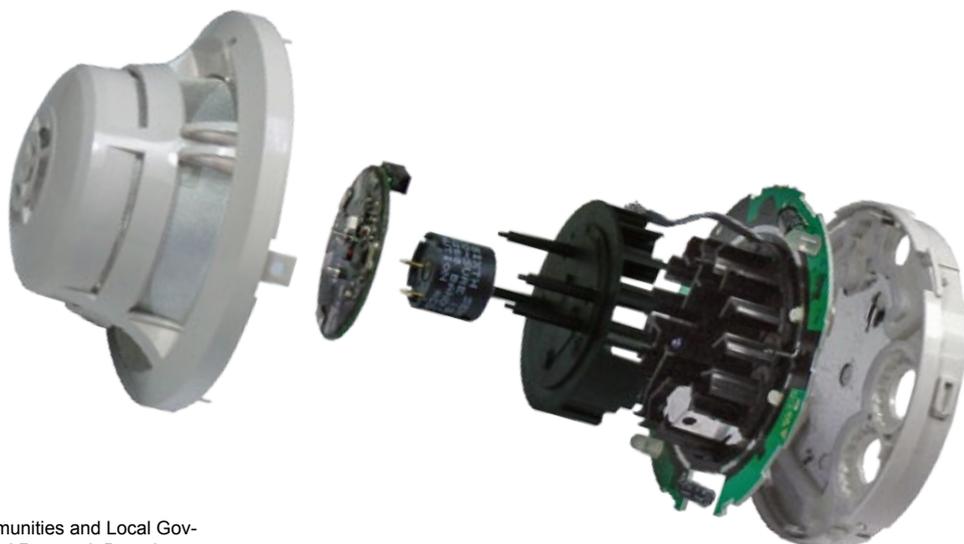
Fires take many forms, from a slow smouldering fire that produces large amounts of smoke and carbon monoxide but little heat through to alcohol fires that produce high temperatures very quickly without any evidence of smoke. This variability is recognised by many agencies around the world, who have defined a series of standard test fires to ensure that any sensor will respond to any expected real fire.

Recent development has provided SMART⁴ with a sophisticated 'brain' capable of intelligently combining the data from the four sensing elements to provide a fast response to real fires while remaining extremely resilient against false alarm incidents.

By utilising infra-red technology, SMART⁴ is not only able to increase the sensitivity of the overall unit in response to 'seeing' flame, but is also able to decrease the sensitivity due to recognised signatures of false alarm causes such as welding.

The ultimate in false alarm immunity

Using a combination of carbon monoxide, heat, optical smoke and infra-red flame sensing elements, SMART⁴ provides the earliest warning of the broadest range of fire conditions whilst minimising the expense and inconvenience of false alarms.



Safety, Integrity and Heritage

Notifier by Honeywell is the world's largest manufacturer and supplier of engineered fire alarm systems. With over 400 Engineered Systems Distributors worldwide, and regional support on every continent, we have the flexibility to meet our customers' requirements. With over 50 years of experience, we offer unrivalled specialist knowledge and products designed to meet all needs. Notifier offers a comprehensive line of

quality fire detection and alarm control solutions. These include everything from smoke detection and notification, non-addressable fire alarm panels, analogue addressable systems, to advanced network and integration packages. As a leader in the fire safety market, Notifier is dedicated to the highest standards of service and product quality. Our operations are accredited to ISO 9001 and our products are designed and

manufactured to meet every major international approval, including LPCB, VdS, UL, ULC and BOSEC/ANPI.

Notifier is a division of Honeywell International, a diversified technology and manufacturing leader, serving customers worldwide. By partnering with Notifier, you have the reassurance of working with a company of global standing that provides cutting edge fire detection systems.



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