

6: VIGILON LOOP DEVICES

Introduction to S-Quad

GENT
by Honeywell

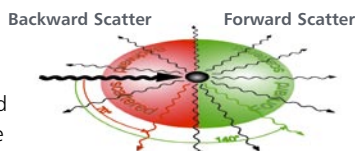
S-Quad Extra Sensory Detection

Gent's new S-Quad sensor range for Vigilon is the UK's most innovative solution to the detection and signalling of fires. Patented dual angle optical scatter smoke detection improves both the speed and integrity of fire detection. This advanced sensing technology is coupled with an integral sounder with speech capability and strobe in the same intelligent device, making S-Quad a truly unique fire detection and alarm sensor.

The S-Quad sensors inherit all the advantages of Vigilon's 34000 range combined with extra features, making Vigilon and S-Quad an industry leading combination for fire detection and alarm signalling.

Dual Angle Optical Scatter Technology

- Light beam is deflected by the particles in the chambers and results in beams scattered in many directions. The ratio of forward and backward scatter indicates the type of particles present



Dual Angle Optical Heat and Carbon Monoxide Multisensor

Combining the CO technology into the O₂H sensor gives this multisensor the benefits of both high false alarm rejection and fast detection of a wide range of fire types.

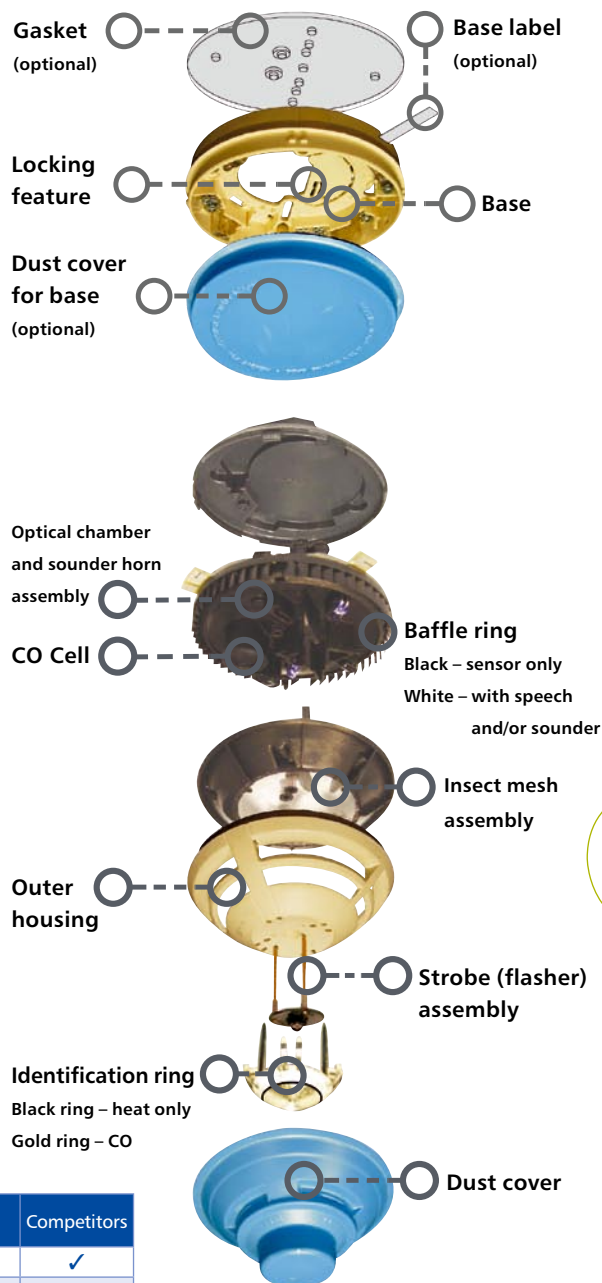
Many combinations of the different sensors are used in the multisensor to enable fast and above all, reliable fire detection. The following 2 cases are an example of this.

CASE 1: SMOULDERING FIRES With smouldering fires, either the CO levels will be sufficient to detect a fire early, or the presence of CO with smoke will enhance the sensitivity of the dual optical and hence the speed of detection. Note that this process is very immune to common false alarm signals, due to the discrimination of the CO cell used in combination with the dual optical sensor.

CASE 2: FLAMING FIRES With flaming fires the dual optical sensor becomes more sensitive. Furthermore if a rise in temperature is detected by the heat sensor, a further increase in optical sensitivity occurs, enabling fast and reliable detection of flaming fires.

Once again this process has good immunity to false alarms, due to the discrimination of the heat sensor used in combination with the dual optical sensor.

S-Quad features



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KEY:	✓ S-Quad as standard	✓ Offered by a few manufacturers	Gent S-Quad	Competitors
Multi-criteria sensors: combined optical/heat with CO gas detection capability	✓	✓	✓	✓
Enhanced voice sounder with integral speech messaging and bell tone	✓		✓	
DDA compliant for audible and visual alarm signal			✓	✓
Dual Angle Chamber using forward/backward analysis for advanced smoke sensing	✓		✓	✓
Puts an end to false alarms through clear distinction between smoke, steam and dust	✓		✓	✓
Early detection using 4 sensors in 1 device each with individual sensitivity settings	✓		✓	
Design flexibility offers programmable states to suit site specific applications	✓		✓	✓
In built input/output capabilities allowing remote LED or signalling of non-fire events	✓		✓	
Built in isolators in every device maintaining loop integrity			✓	
Reduced installation and ongoing maintenance costs			✓	✓
SAFE addressing – Soft Addressed Firmware Encoded as standard			✓	
Aesthetically pleasing low profile sensor with optional semi-flushing kit			✓	✓

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10 Reasons to specify S-Quad



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1

Advanced Sensing Technology coupled with integral sounder, speech capability and strobe in one intelligent device provides the UK's most innovative solution to the detection and signaling of fires.

2

Rapid Fire Detection 4 separate sensing elements including CO can be set with individual sensitivity levels and sensor 'states' can be programmed for different time periods to suit all applications and environments.

3

Minimal False Alarms The combined power of S-Quad and Vigilon panel provides quick, intelligible decision making. The S-Quad dual angle optical sensor recognises a clear distinction between smoke and steam.

4

Saves Lives The S-Quad range incorporates intelligent heat and gas sensing technology to allow the early detection of fires, which are known to be particularly hazardous to building occupants.

5

Safe Evacuation Voice messaging capability through the sounder functionality ensures quick and safe evacuation in the event of a fire.

6

Cost Savings S-Quad provides four functionalities within one device supported by 2-wire loop Vigilon system, with built-in isolators in every device.

7

Compliance with DDA (Disability Discrimination Act 1995) Legislation Built-in high intensity flashing strobe warns those with hearing difficulties of a potential fire hazard – now a legal requirement in all public buildings.

8

The Power of Vigilon Supports the largest number of Fire Detection and Alarm products on the same 2 cables with soft or SAFE (Soft Addressed Firmware Encoded) addressing options.

9

Monitored Line Input / Output Option Output can be used for a remote LED. Input can have a separate identity to the sensor although they share the same electronic address.

10

Peace of Mind All Gent fire products are designed to be compatible with the same successful Vigilon platform and supported by a UK wide network of Approved System Integrators.