7: THE POWER OF THE VIGILON LOOP

Introduction to S-Quad

GENT
by Honeywell

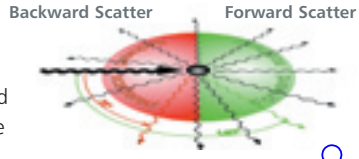
S-Quad Extra Sensory Detection

Gent's 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.

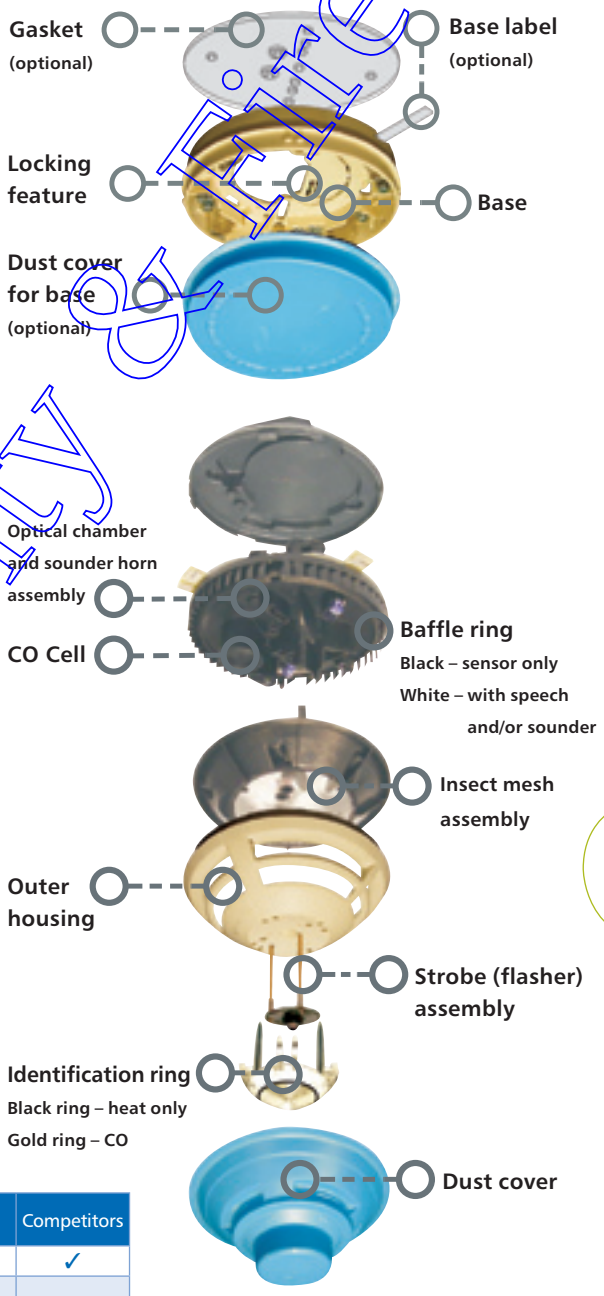
Many combinations of the different sensors are used in the multisensor to enable fast and above all, reliable fire detection. The following 2 cases are an example of this.

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



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	✓	✓