GENT
by Honeywell

Section 5:

Vigilon Fire Detection

5
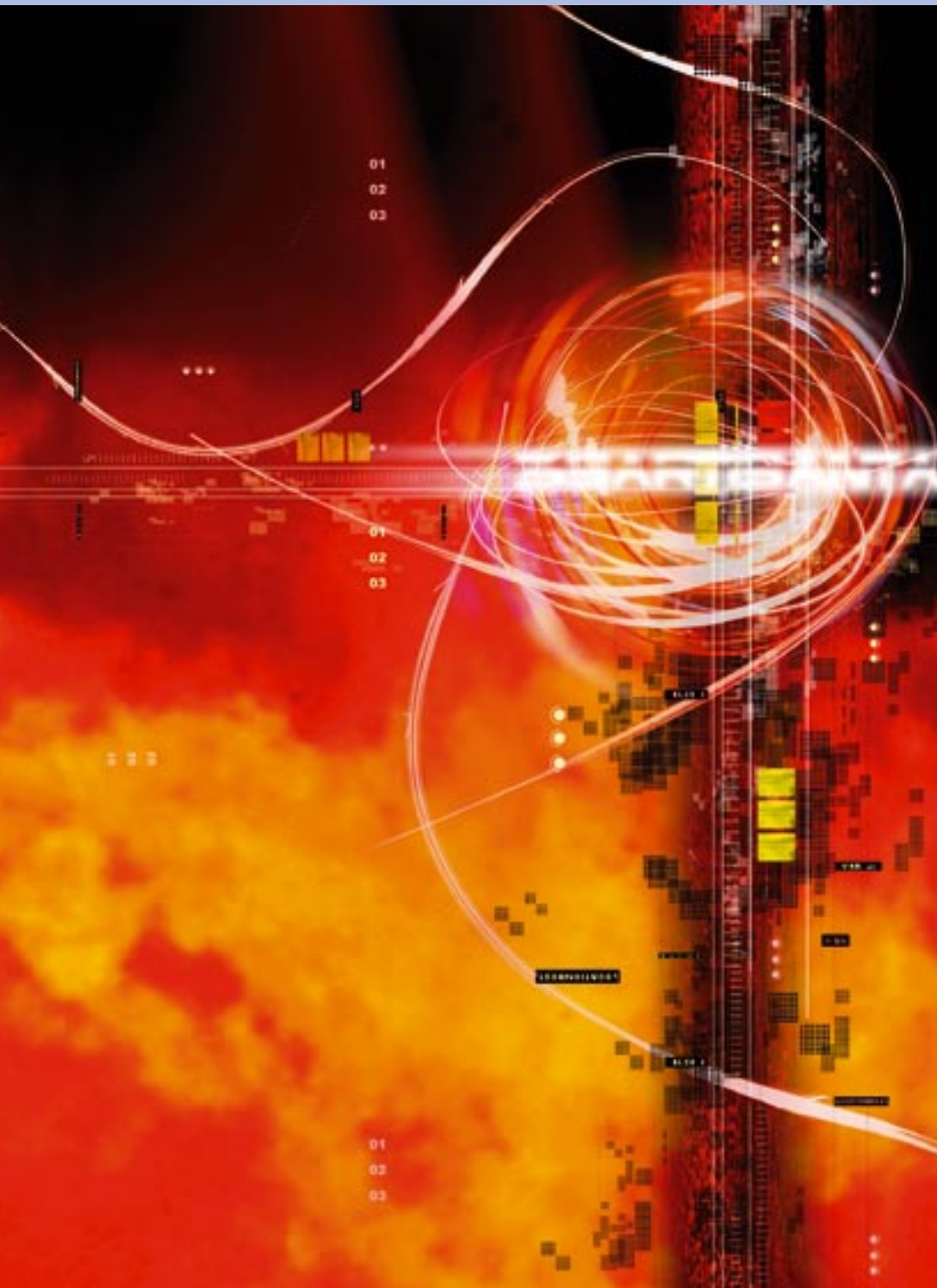
GENT
by Honeywell

Section 5.1:

Vigilon

5

5.1: VIGILON FIRE DETECTION

# Vigilon System Overview

GENT
by Honeywell

The feature-packed Vigilon analogue addressable fire detection and alarm system from Gent offers medium to large sized building owners the latest in system flexibility and control panel aesthetics.

Vigilon offers a degree of system sophistication that has not¹ previously been available and incorporates a host of features designed to make it the simplest system to install, configure and use.

As well as providing the user with clear comprehensive information in the event of a fire, Vigilon additionally provides an entire historic log of the system's management information. Should a system fault occur a detailed explanation is shown and the user can at any time navigate through the faults history.

5

GENT
by Honeywell

System Architecture

5
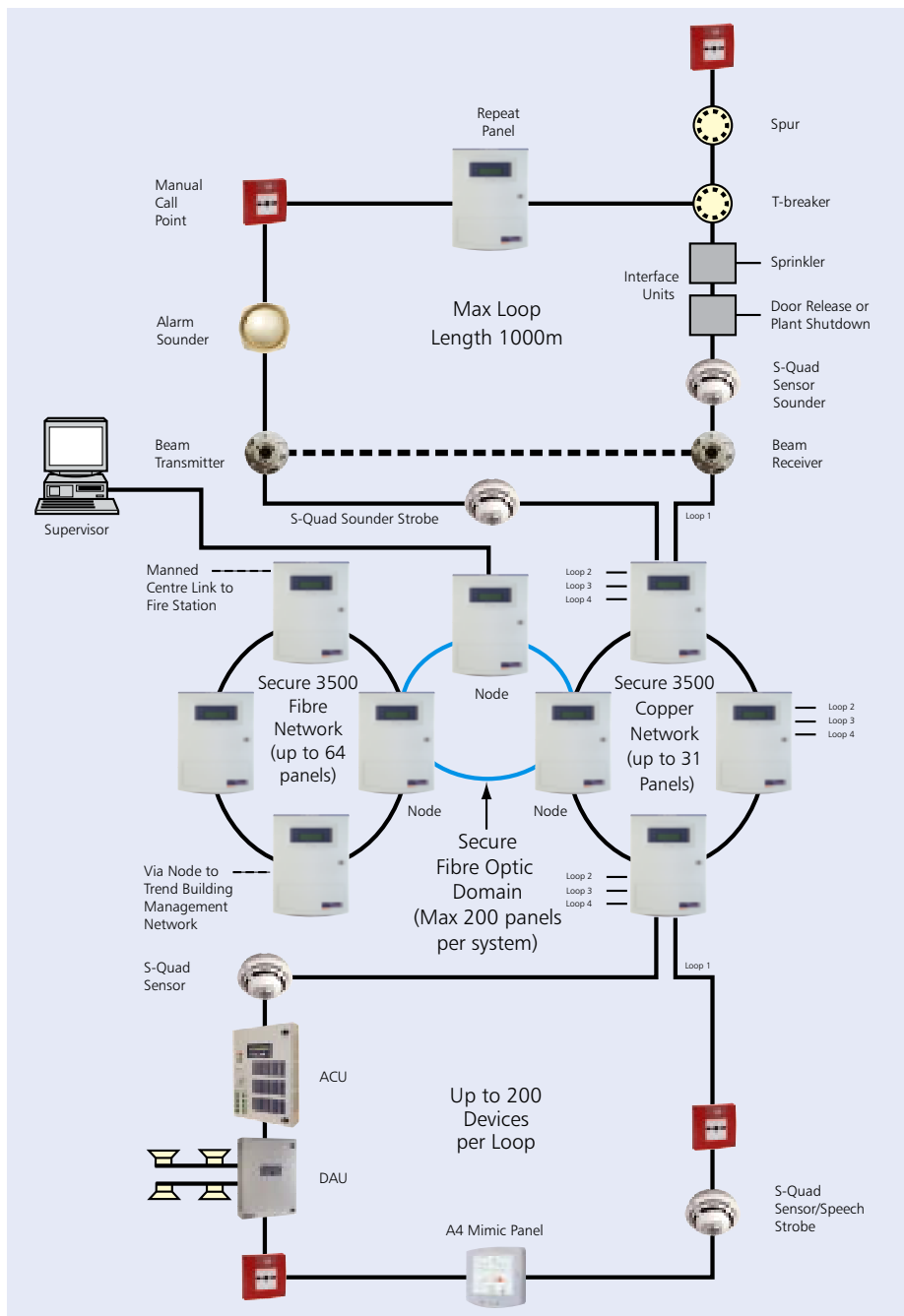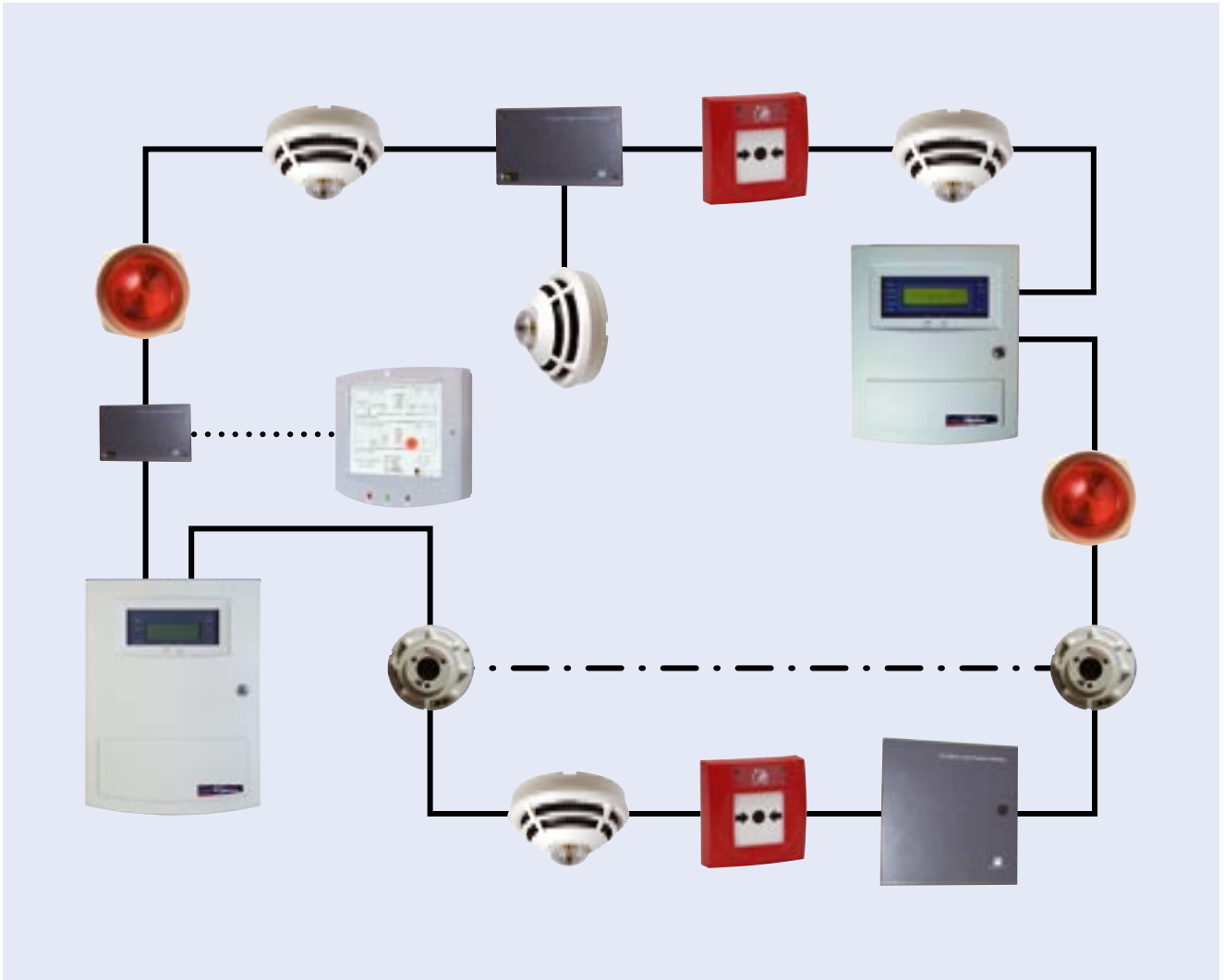
5.1: VIGILON FIRE DETECTION

10 reasons to specify Vigilon

GENT
by Honeywell

1   **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.

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

3   **Rapid Fire Detection**   The 4 separate sensing elements in the S-Quad, 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.

4   **Cost Savings**   Cable runs are shorter. 2 core costs less than 4 core. Overall cable costs are normally 30% less than other systems.

5   **Create Seamless Network**   Connect up to 200 panels together and retain control on large or complex sites. Also, new buildings or extensions are easily accommodated onto the existing system.

6   **Customise your Fire Plans**   Evacuating public areas or production lines is disruptive and costly. Vigilon Compact's powerful software gives you flexibility. Areas throughout the building can be sectored to give an evacuate or alert signal on alarm, or can be configured with pre-set delays.

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

8   **Loop powered sounder/strobe**   Loop powered sounder/strobes save on cabling and interface costs whilst ensuring compliance with the Disability Discrimination Act 1995. Built-in high intensity flashing strobes warn those with hearing difficulties of a potential fire hazard – **now a legal requirement in all public buildings**.

9   **Clear Information**   An 8-line by 40 character display means the user is not limited in describing the position or nature of an emergency. A clear backlit LCD display reduces confusion and speeds response.

10   **Integrated Voice and Graphics Systems**   Vigilon may be integrated with Gent's Vigilon Voice evacuation system, or connected to Supervisor, a graphic display for single point control and monitoring.

5

GENT
by Honeywell

5.1: VIGILON FIRE DETECTION

Vigilon Control Panel

Vigilon 1-6 loop control panels can accommodate up to 200 devices on each loop.

The panel is available with 24 or 72 hour standby facility.

Advanced networking options allow multi-domain networks of up to 250 panels.

Vigilon's backlit 8-line by 40 character display presents clear indication of fire or fault locations. To meet the requirements of BS 5839 Part 1: 2002 the panel also has separate zonal indication. This comprises 32 fire LED's which give an overview indication 'at a glance' without the need for manual intervention by fire fighters.

The standard Vigilon Panel has 24 hour battery standby and up to 4 loops and a network card. The enhanced panel can offer 6 loops and a network card and up to 72 hour battery standby.

Fire plans can be tailored to precisely meet project requirements.

Vigilon Control Panel

TECHNICAL SPECIFICATION		
Type	Control panel	Control panel
Max No of Loops	4	6
Loop Capacity	200	200
Batteries	2 x 12V @12Ah	4 x 12V @ 12Ah
Battery Standby	24 hours standby + 30 minutes alarm upgradeable to 72 hours standby + 30 minutes alarm	72 hours standby + 30 minutes alarm
Approx Weight	16.5 Kg	16.5 Kg
Operating Temperature	0°C to 45°C	0°C to 45°C
Relevant Standard	EN54 Parts 2 & 4	EN54 Parts 2 & 4
Cable Entry	Top and rear knockins	Top and rear knockins
Approvals	LPCB approval to EN 54 Parts 2 & 4 pending	LPCB approval to EN 54 Parts 2 & 4 pending

	A	B	C
Control Panel	408	539	151
Battery Box	382	309	112

Dimensions (mm)
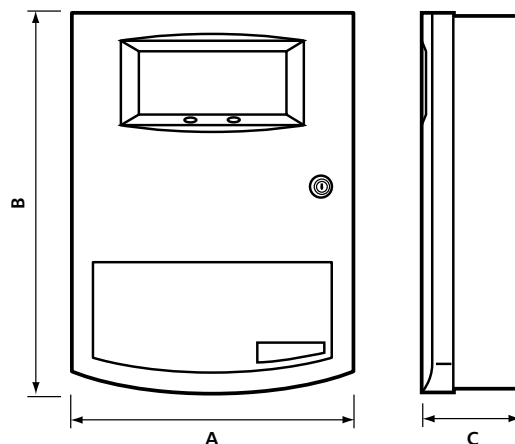
ORDER CODES

EN54 Control Panels

|	
1-4 Loop Panel with 1 Loop Card	VIG1-24
1-6 Loop Panel with 1 Loop Card	VIG1-72
Additional loop	VIG-LPC
Network Card	VIG-NC
Fibre Net	VIG-NC-FO
Stainless Steel Door for Vigilon Main Control Panel	VIG-DOOR-SS
Vigilon Main control panel flush mounting kit	VIG-FLUSH-SS

For existing systems to BS 5839, compatible panels are still available for expansion. Contact Gent for details.

GENT
by Honeywell

Section 5.2:

Vigilon Compact

5.2: VIGILON COMPACT FIRE DETECTION
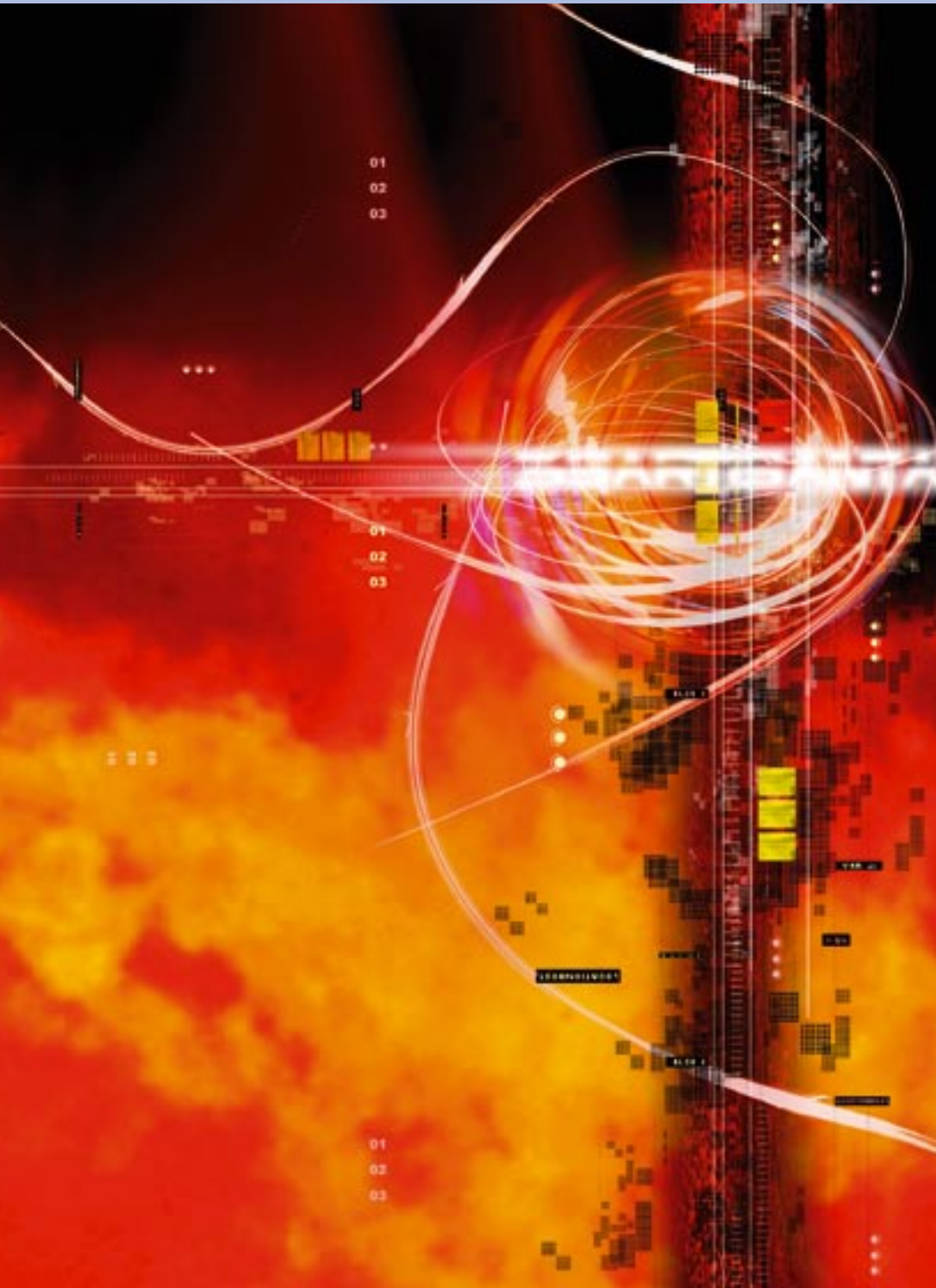
Vigilon Compact Overview

GENT
by Honeywell

Vigilon Compact analogue addressable 1-2 loop panels offer small to medium sized building owners the unique system functionality of Vigilon with the very best in control panel aesthetics – stainless steel door options are available to provide a discreet and luxurious feel in upmarket office environments.

The introduction of innovative design features into this panel means that the wall space needed to mount the panel is now 60% smaller than a standard Vigilon installation.

Vigilon Compact analogue addressable panels fully comply with EN54: Parts 2 & 4 and can be specified with 1 or 2 detection loops, each capable of accommodating up to 200 Vigilon devices including repeat panels, interfaces, manual call points and S-Quad sensor/sounder/strobes.
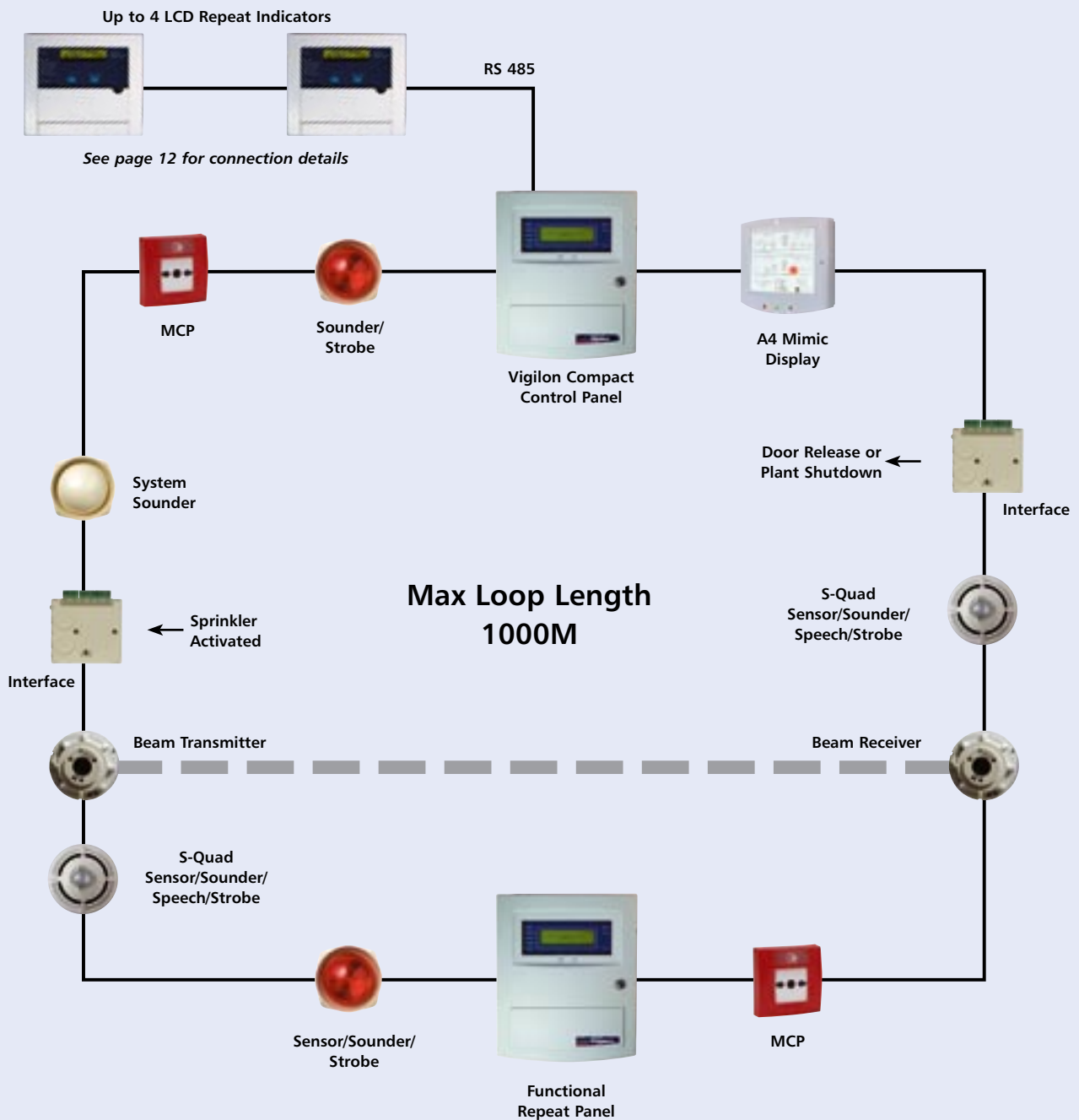
Gent's innovative new S-Quad is a combined multi-sensor range with speech, sounder and strobe in one intelligent unit.

Fully compatible with Gent's S-Cubed alarm devices (offering sound, speech or strobe effects in combination), Vigilon Compact also offers the familiar advantages of combined sensor-sounders and loop powered beam detection with integral short circuit isolators fitted into every loop device.

Additional features

● Vigilon's powerful software allows the fire alarm system to be configured to meet the fire alarm needs of the building

● Combining the proven reliability of the Vigilon range of sensors and true analogue sensing keeps false alarms to a minimum

● Alarm sound levels can be increased by simply replacing a sensor with a sensor/sounder, saving costly additional wiring

● To meet the requirements of BS 5839-1: 2002 the Vigilon Compact is supplied with separate zonal indication, visible at access level 1. This comprises 32 fire LEDs (secret till lit) which enables 'at a glance' overview indication, without the need for manual intervention by fire fighters

5

GENT
by Honeywell

5.2: VIGILON COMPACT FIRE DETECTION

Vigilon Compact System Architecture

Up to 4 LCD Repeat Indicators

RS 485

See page 12 for connection details

MCP

Sounder/ Strobe

Vigilon Compact Control Panel

A4 Mimic Display

Door Release or Plant Shutdown

Interface

System Sounder

Sprinkler Activated

Interface

S-Quad Sensor/Sounder/ Speech/Strobe

Max Loop Length 1000M

Beam Transmitter

Beam Receiver

S-Quad Sensor/Sounder/ Speech/Strobe

Sensor/Sounder/ Strobe

MCP

Functional Repeat Panel

Note: Speech and standard tone sounders can both be used on a system to meet site requirements, but should not be mixed within an alarm zone.

5.2: VIGILON COMPACT FIRE DETECTION

10 reasons to specify Vigilon Compact

GENT
by Honeywell

1 **Compact size** The introduction of innovative design features into this panel means that the wall space needed to mount the panel is now 60% smaller than a standard Vigilon installation.

2 **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.

3 **Minimise false alarms** The combined power of S-Quad and the Vigilon Compact panel provides quick, intelligent decision making. The S-Quad dual angle optical sensor recognises a clear distinction between smoke and steam.

4 **Rapid fire detection** The 4 separate sensing elements in the S-Quad, 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.

5 **Cost savings** Cable runs are shorter. 2 core costs less than 4 core. Overall cable costs are normally 30% less than other systems.

6 **Customise your fire plans** Evacuating public areas or production lines is disruptive and costly. Vigilon Compact's powerful software gives you flexibility. Areas throughout the building can be sectored to give an evacuate or alert signal on alarm, or can be configured with pre-set delays.

7 **Safe evacuation** Voice messaging capability through the sounder functionality of S-Quad ensures quick and safe evacuation in the event of a fire.

8 **Loop powered sounder/strobe** Loop powered sounder/strobes save on cabling and interface costs whilst ensuring compliance with the Disability Discrimination Act 1995. Built-in high intensity flashing strobes warn those with hearing difficulties of a potential fire hazard – **now a legal requirement in all public buildings**.

9 **Clear information** An 8-line by 40 character display means the user is not limited in describing the position or nature of an emergency. A clear backlit LCD display reduces confusion and speeds response.

10 **Compliance with the relevant industry standards** GENT are LPCB approved for both systems and products and Vigilon Compact complies with BS/EN standards.

5

GENT
by Honeywell

5.2: VIGILON COMPACT FIRE DETECTION

Vigilon Compact Control Panel

A one to two loop panel accommodating up to 200 devices per loop with the capability of networking with other Compact or Vigilon Panels.

Multiple panel networks can be programmed seamlessly as one system, allowing for flexible design and total system management.

LCD display allows clear indication of fire or fault location.

Site specific fire plans can be programmed to meet the evacuation needs of the building.
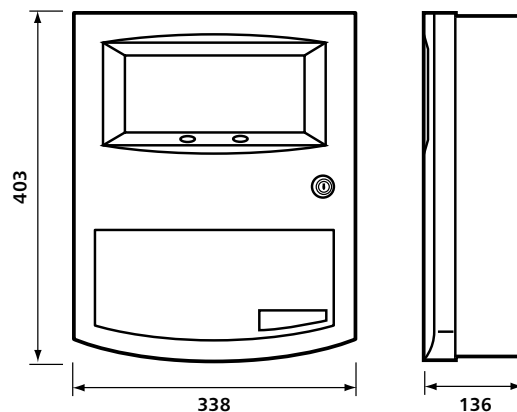
5

Vigilon Compact Control Panel

TECHNICAL SPECIFICATION	
Type	Control panel
Loop Capacity	200
Networking Capacity	Upto 32 panels
Ingress Protection	IP31
Approx Weight	16.6 Kg (with batteries)
Operating Temperature	0ºC to +45ºC
Relevant Standards	EN54 Pt 2 & 4
Batteries	2 x 12V @ 12 Ah
Battery Standby	24 Hours + 30 minutes alarm
Supply Voltage	216V – 253V 50Hz
Power Consumption	140 W
Cable Entry	Top and rear knockins
Auxiliary Contacts	Programmable to activate on Fire, Fault or Disablement. (1 x SPCO 1 x DPCO)
Sounder Circuits	2 circuits @ 250mA each
Monitored input	1 input which is programmable to perform a logical action via a command build
Communication ports	2 x RS485, 1 x RS232 selectable functions
Approvals Pending	LPCB

ORDER CODES	
Control Panel	COMPACT-24-N
LCD Repeat panel	COMPACT-RPT
Flush fixing frame	COMPACT-FLUSH
Additional Loop card	COMPACT-LPC
Network card for Vigilon Network	
	COMPACT-NC
Optical only sensor	S4-715
Stainless Steel Options:	
Stainless steel door	VIG-RPT-DOOR-SS
Stainless steel flush frame	
	COMPACT-FLUSH-SS

Dimensions (mm)

403

338

136

5.2: VIGILON COMPACT FIRE DETECTION

Repeat Panel

GENT
by Honeywell

Vigilon Repeat Panel

A repeat panel repeats all information provided to the main control panel and provides mains control functions.

The repeat panel is connected directly to the loop but requires a mains supply to run its battery backed power supply.

TECHNICAL SPECIFICATION	
Type	Repeat panel
Max No per Loop	4
Loop Capacity	N/A
Batteries	12V @ 7Ah
Battery Standby	24 hours standby + 30 minutes alarm, upgradeable to 72 hours standby + 30 minutes alarm
Approx Weight	9 Kg
Operating Temperature	0°C to 45°C
Relevant Standard	EN54
Cable Entry	Top and rear knockins

5

Dimensions (mm)

403

338

101

GENT
by Honeywell

5.2: VIGILON COMPACT FIRE DETECTION

LCD Repeat Panel

The LCD repeat panel indicates Fire, Fault and Disablement information on a 40 character display, either directly as events occur or by accessing the logs via dedicated keys.

A maximum of 4 Repeat Panels can be connected to a Vigilon Compact control panel.

Vigilon Compact Repeat Panel

| TECHNICAL SPECIFICATION	
Type	LCD Repeat Panel (Indication Only)
Ingress Protection	IP30
Supply Voltage	21 – 30V dc
Power Consumption	Approx 30 mA
Approx Weight	0.75 Kg
Operating Temperature	0ºC to +45ºC
Communication ports	1x RS485 to communicate with the main control panel
Cable Entry	Top and rear knockins
Approvals	N/A

Dimensions (mm)

177

206

49
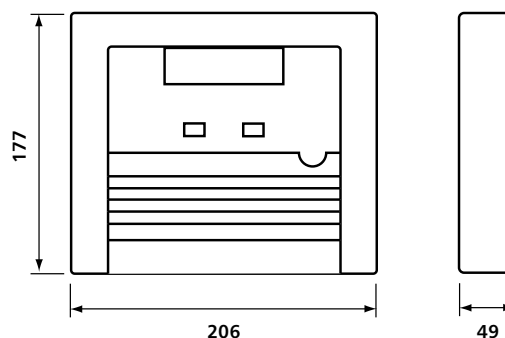
Wiring Details – LCD Repeat Panel (indication only)

Max Cable Length 1000M

RS 485

24Vdc

One LCD repeat panel can be powered from the control panel, additional repeat indicators must be powered from an additional power supply.

The communication link to the panel is monitored, so if power to the repeat indicators fails the fault will be reported at the control panel.

Monitored Battery Backed 24V PSU

Vigilon Compact Control Panel
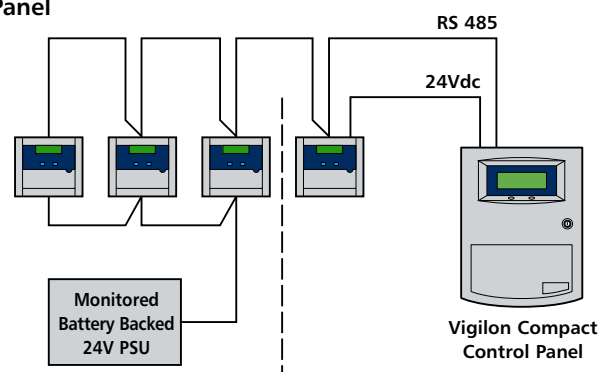
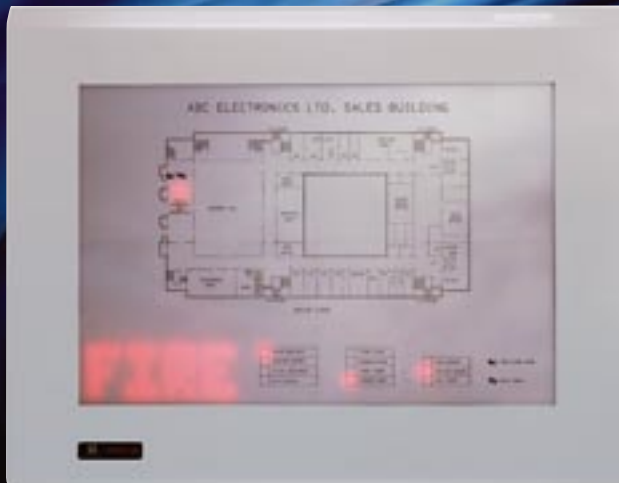| ORDER CODES	
LCD Repeat panel	COMPACT-RPT

5

5.2: VIGILON COMPACT FIRE DETECTION

Mimic Panels

GENT
by Honeywell

A2 Mimic

The A2 and A4 Mimic Panels provide a pictorial representation of the building's layout allowing rapid indication of fire location. The mimic panels have a selection of programmable LED's onto which a CAD drawing of the site is overlaid.

Alternatively a zonal overlay kit may be used.

Overlays are easily updated if site details alter.

TECHNICAL SPECIFICATION		
Type	A2 Mimic	A4 Mimic
Max Quantity per Loop	4	4
Batteries	12V @ 7Ah	12V @ 7Ah
Battery Standby	24 hours + 30 minutes alarm upgradeable to 72 hours	
Approx Weight	20 Kg	Display 2.3 Kg, Control panel 10.4 Kg
Operating Temperature	0ºC to 45ºC	
Relevant Standard	BS 5839: Part 4 + EN54: Part 2 & 4	
Cable Entry	Top conduit knockins	Rear
Load Factor	3	3

5

	A	B	C
A2 Mimic	650	830	90
A4 Mimic Display	276	330	73

Dimensions (mm)
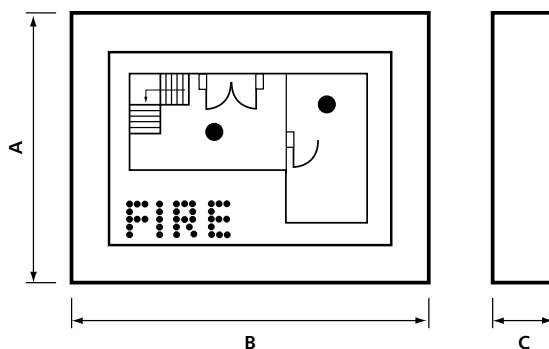
A4 Mimic Display

ORDER CODES	
A4 Mimic Panel	VIG-MIM-A4
A4 Zonal Mimic	VIG-ZONE-A4
A2 Mimic Panel	VIG-MIM
A2 Zonal Mimic	VIG-ZONE

GENT
by Honeywell

5.2: VIGILON COMPACT FIRE DETECTION

Notes