SafePark

Introducing a complete solution for car park gas detection backed by more than a century of innovation.



Less Money. Less Effort. Total Peace of Mind.



SafePark Document Reference SL-098 V1.3

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A Gas Detection System that Pays for Itself

Less Money

Electricity is expensive, and running a ventilation system all day uses a lot of electricity. But, as the emission levels in a car park vary over the course of a day, constant ventilation is an unnecessary expense. IGD's SafePark Gas Detection System will automatically engage your ventilation fans at the appropriate level when emission levels are breached and reduce ventilation when safe emission levels are established, potentially saving you thousands on electricity, without compromising on safety.

Vary your ventilation with IGD.

Our 2-Wire Addressable system enables you to interconnect multiple detectors on a single cable highway equipping you with accurate, reliable gas monitoring across the car park. Our Sentinel+[™] software also accommodates the addition of various external devices connected directly from the nearest detector, and with SafePark's internal Wi-Fi, cloud-based data acquisition, and SMS alerts you can remotely access your setup to perform maintenance and download data logs. You can even integrate our components into your system using your existing wiring. All of this means we can significantly cut your installation costs.

Leave it to IGD Less Effort

We do all the hard work at our end to ensure that your installation is as straightforward as possible. The SafePark Gas Detection System provides you with round-the-clock monitoring and automation of your setup, only alerting you to an issue when your attention is required. The modular flexibility of all SafePark components means we can provide the perfect gas detection solution for any car park with only three elements. Our intuitive system is easy to address, maintain and service putting you in complete control of your gas detection and ventilation systems.



Detectably Better Coverage Total Peace of Mind

A car park ventilation system must be compliant with the following standards:

- EN 50545-1
- IEC 60079-29-1

But knowing everything about the relevant safety standards isn't your job, it's ours. We hold all appropriate accreditations and with an IGD setup, you can rest assured that your gas detection system is reliable, fully compliant, and backed by over a century of expertise and IGD's 10-year warranty.



SafePark Products & Order Codes

SafePark Detector

SafePark Detectors come pre-calibrated to monitor nitrogen dioxide (NO_2) , nitric oxide (NO)carbon monoxide (CO) and flammables (LPG and hydrogen) providing fast, accurate, and reliable gas detection. All our long-life detectors are backed by our 10-year electronics guarantee.

Gas	Range	Order Code
Nitric Oxide	0-100PPM	TOC-CAR-NO
Nitrogen Dioxide	0-30PPM	TOC-CAR-NO2
Carbon Monoxide	0-300PPM	TOC-CAR-CO
Flammables	0-100% LEL	TOC-CAR-FLAM



SafePark Controller

The SafePark Controller is the best option for HVAC installers, offering complete control of every element of your gas detection setup on our 2-Wire Addressable system and providing you with digital readings through our Wi-Fi interface. The Controller is compact and fits onto a DIN rail to save on space and comes in both a single port and a 6-port version.

Order Code	Highways	Devices
TOC-GATEWAY-C	1	up to 32
TOC-GATEWAY-C+6	6	up to 128

SafePark Control Panel

The SafePark Control Panel is best suited to updates for existing systems. It's an alternative to the SafePark Controller that boasts all the same features and more. The Control Panel comes in its own custom housing with a 2×8 RGB colour change display, jog wheel, 1-Click setup, and the ability to backup any customised settings using our Wi-Fi interface.

Order Code	Highways	Devices
TOC-650C-150	6	up to 128









Example Systems





SafePark Controller Specifications

Power	Weight	Dimensions (w×d×h)	Temperature Range
18-28 VDC	400 g	See Diagram	0° to +55°C (+32° to +131°F)
Humidity	Outputs	Inputs	Mounting
0% to 95% RH Non-Condensing	3 off SPCO Relays 4A Non-Inductive User Configurable 1 off Fault Relay	Up to 32 off Addressable Series Detectors or I/O Modules limited by	Din Rail
	Non-Inductive 1 off	cable size and PSU	
Communication	Solid State Beacon Sounder Output		
IGD Sentinel+™ Protocol, 2-Wire Connection L1,L2	RS485 Modbus RTU RS485 BACnet MSTP Wi-Fi Embedded Setup pages		

Advanced Car Park Gas Detection SafePark Detector Specifications

Power	Weight	Dimensions (w×d×h)	Housing Material
18 to 28V DC	300 g	See Diagram	ABS
Temperature Range	Humidity	Ingress Protection	Mounting
-10° to +55°C (+14° to +131°F)	0% to 95% RH Non-Condensing	IP54	Wall Mount
I/O		Sensor	Communication
 off SPCO Relays 4A/230V AC Non-Inductive User Configurable from 650/750 Controllers multifunction ports as: Digital Input Max 0.2Hz Digital Input 0-3V Max 0.2Hz 4-20mA input or Solid State Output 24V DC Max 300mA shared Across both Ports 		Pellistor and Electrochemical	IGD Sentinel+™ Protocol, 2-Wire Connection L1,L2
		Installation Cables	
		Supported Installation Cables 2 Core 1.5mmSQ or 2.5mmSQ See IGD Cable System Calculator Typically SWA, EP200, CX Screened or Similar	

SafePark Control Panel Specifications

Power	Weight	Dimensions (w×d×h)	Temperature Range
110/230 VAC 50/60Hz 150W	1.75Kg	382 × 120.5 × 292mm (15.04 × 4.74 × 11.5")	-5° to +40°C At +55°C De-Rate PSU Output by 30%
Ingress Protection	Housing Material ABS	Humidity 0% to 95% RH Non-Condensing	(+23° to +104°F At +131°F De-Rate PSU Output by 30%)
Mounting Wall Mount	Display 2 Lines × 8 Digit LCD Display Multi-Colour Backlight (Red-Alarm, Yellow- Fault, Blue-Normal)	User SafePark-650 IGD Jog Wheel Option Select	Inputs Up to 128 off Addressable Series Detectors or I/O Modules over 6 Addressable Highways
Outputs		Other I/O	
3 off SPCO Relays 4A Non-Inductive User Configurable 1 off Fault Relay SPCO Relays 4A Non-Inductive 1 off Solid State Beacon Sounder Output Additional Digital Inputs/Relay Outputs can be added to highways RS485 Modbus RTU RS485 BACnet MSTP Wi-Fi Embedded Setup pages		Sounder 85dB @ 100mm (Mutable) Dedicated E-Stop/ Slam Switch Input Dedicated Fire System Interlock	



SafePark Controller Dimensions



Advanced Car Park Gas Detection SafePark Detector Dimensions



Advanced Car Park Gas Detection SafePark Control Panel Dimensions





EC Declaration of Conformity

Declares the product listed as: TOC-CAR/TOC-750

> Addressable Safe Area Gas Detector

Issuers name and address: Oliver IGD Limited of **Triton House** Crosby St Stockport, SK2 6SH United Kingdom

Are in conformity with the provisions of the following European Directive(s) when installed, operated, serviced and maintained in accordance with the installation and operating instructions contained in the product documentation.

United Kingdom Electromagnetic Compatibility Regulations 2016 Electrical Equipment (Safety) Regulations 2016 European Union 2004/108/EC **EMC Directive** 2014/35/EU Low Voltage Equipment Directive (note not applicable to 24V DC Powered Versions)

And that the standards and/or technical specifications referenced below have been applied or considered.

IEC 50194 IEC/UL/CSA 61010-1	Electrical apparatus for the detection of combustible gases Safety requirements for electrical equipment for measurement, control, and laboratory use. General requirements
IEC 50270	Electromagnetic compatibility - Electrical Equipment for the Detection and Measurement of Combustible Gases, toxic Gases or Oxygen
IEC 60529	Degree of Protection to IP54
IEC 60068-2-6	Vibration
IEC 60335:2012+A11:2014	Electrical Safety
EN50545-1	Electrical apparatus for the detection and measurement of toxic and combustible gases in car parks and tunnels (complies to)
Technical File Reference	T750B-TF9

Quality Management Certificate Number FS 646773 EMS 696504

Oliver IGD Limited operate an independently assessed ISO 9001:2015 Quality Management System & ISO 14001 **Environmental Management**

> BSI Assurance UK LTD, Chiswick High Road, London W4 4AL UK



CE

UK

Issued by: Oliver IGD Limited, Stockport, SK2 6SH, United Kingdom

Signature: 🤇 🗳

Name:

Declaration of Conformity in accordance with EN ISO/ IEC 17050-1:2010

Andrew J Collier M.I.O.D Position: Managing Director

Date: 1 July 2024

Declaration Ref: DEC-6

EC Declaration of Conformity

Declares the product listed as: (SafePark)TOC-GATEWAY

> Addressable Control Panel Card

Issuers name and address: Oliver IGD Limited of **Triton House** Crosby St Stockport, SK2 6SH United Kingdom

Are in conformity with the provisions of the following European Directive(s) when installed, operated, serviced and maintained in accordance with the installation and operating instructions contained in the product documentation.

United Kingdom Electromagnetic Compatibility Regulations 2016 Electrical Equipment (Safety) Regulations 2016 European Union 2004/108/EC **EMC Directive** 2014/35/EU Low Voltage Equipment Directive (note not applicable to 24V DC Powered Versions)

And that the standards and/or technical specifications referenced below have been applied or considered.

IEC 60079-29-1:2016 2nd Ed	Explosive Atmospheres. Gas Detectors. Performance Requirements of Detectors for Flammable Gases.
IEC 50194	Electrical apparatus for the detection of combustible gases
IEC/UL/CSA 61010-1	and laboratory use.
	General requirements
IEC 50270	Electromagnetic compatibility - Electrical Equipment for the Detection and Measurement of Combustible Gases, toxic Gases or Oxygen
IEC 60529	Degree of Protection to IP54
IEC 60068-2-6	Vibration
IEC 60335:2012+A11:2014	Electrical Safety
EN50545-1	Electrical apparatus for the detection and measurement of toxic and combustible gases in car parks and tunnels (complies to)
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> BSI Assurance UK LTD, Chiswick High Road, London W4 4AL UK

Issued by: Oliver IGD Limited, Stockport, SK2 6SH, United Kingdom

Signature: 🤇

Declaration of Conformity in accordance with EN ISO/ IEC 17050-1:2010

Name:

Andrew J Collier M.I.O.D Position: Managing Director

Date: 1 July 2024

Declaration Ref: DEC-14

CE

UK

EC Declaration of Conformity

Declares the product listed as: (SafePark)TOC-650

> Addressable Gas **Detection Control Panel**

Issuers name and address: Oliver IGD Limited of **Triton House** Crosby St Stockport, SK2 6SH United Kingdom

Are in conformity with the provisions of the following European Directive(s) when installed, operated, serviced and maintained in accordance with the installation and operating instructions contained in the product documentation.

United Kingdom Electromagnetic Compatibility Regulations 2016 Electrical Equipment (Safety) Regulations 2016 European Union 2004/108/EC **EMC Directive** 2014/35/EU Low Voltage Equipment Directive (note not applicable to 24V DC Powered Versions)

And that the standards and/or technical specifications referenced below have been applied or considered.

IEC 60079-29-1:2016 2nd Ed	Explosive Atmospheres. Gas Detectors. Performance Requirements of Detectors for Flammable Gases.
IEC 50270	Electromagnetic compatibility - Electrical Equipment for the Detection and Measurement of Combustible Gases, toxic Gases or Oxygen
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IEC 60335:2012+A11:2014	Electrical Safety
IEC/UL/CSA 61010-1	Safety requirements for electrical equipment for measurement, control, and laboratory use
EN50545-1	Electrical apparatus for the detection and measurement of toxic and combustible gases in car parks and tunnels (complies to)
Technical File Reference	T650-TF9

Quality Management Certificate Number FS 646773 EMS 696504

Oliver IGD Limited operate an independently assessed ISO 9001:2015 Quality Management System & ISO 14001 **Environmental Management**

> BSI Assurance UK LTD, Chiswick High Road, London W4 4AL UK



Issued by: Oliver IGD Limited, Stockport, SK2 6SH, United Kingdom

Signature: 🤇

Declaration of Conformity in accordance with EN ISO/ IEC 17050-1:2010

Name: Position:

Andrew J Collier M.I.O.D Managing Director

Date: 1 July 2024

Declaration Ref: DEC-9