



International Gas Detectors

# Gas Detection Brochure



A Member of  
safe monitoring group





# International Gas Detectors Introduction



International Gas Detectors (IGD) was established in 1917 by Henry Ringrose. Since our incorporation, we've strived to continuously develop Detectably Better technologies for gas detection. From the development of the first flammable gas detector in 1917, to our 2-Wire Addressable gas detection technology in the 2020's.

Now over a century since our incorporation, we manufacture detectors for over 700 gases and vapours, at our purpose-built facility in Stockport. Being in total control of the process means we are in total control of the delivered product.

We've also partnered with SENKO and mPower to offer a range of portables, enabling us to supply a combined solution for all our clients. Both fixed and portable technologies are backed by over a century of gas detection design and manufacturing experience.

Ensuring you receive Detectably Better gas detection and support for your gas safety needs.

\*10-Year warranty on IGD Electronics

Concept

Product Design

Software

Testing

Production

## Sentinel+™ Addressable Technology

We are proud innovators in our industry, being the first gas detection company to offer addressable technology. Sentinel+ is the digital communication protocol used on our 2-Wire gas detection systems.

- + Immunity from EMC (Electromagnetic Compatibility)
- + Upgrade and reuse existing cabling
- + Simple calibrations and bump testing
- + System backup
- + Internet of Things (IoT) capability with remote monitoring and cloud acquisition
- + Up to 70% faster installations
- + Faster communication than the industry standard
- + 80% More capability per detector than the industry standard

### Approved to standards

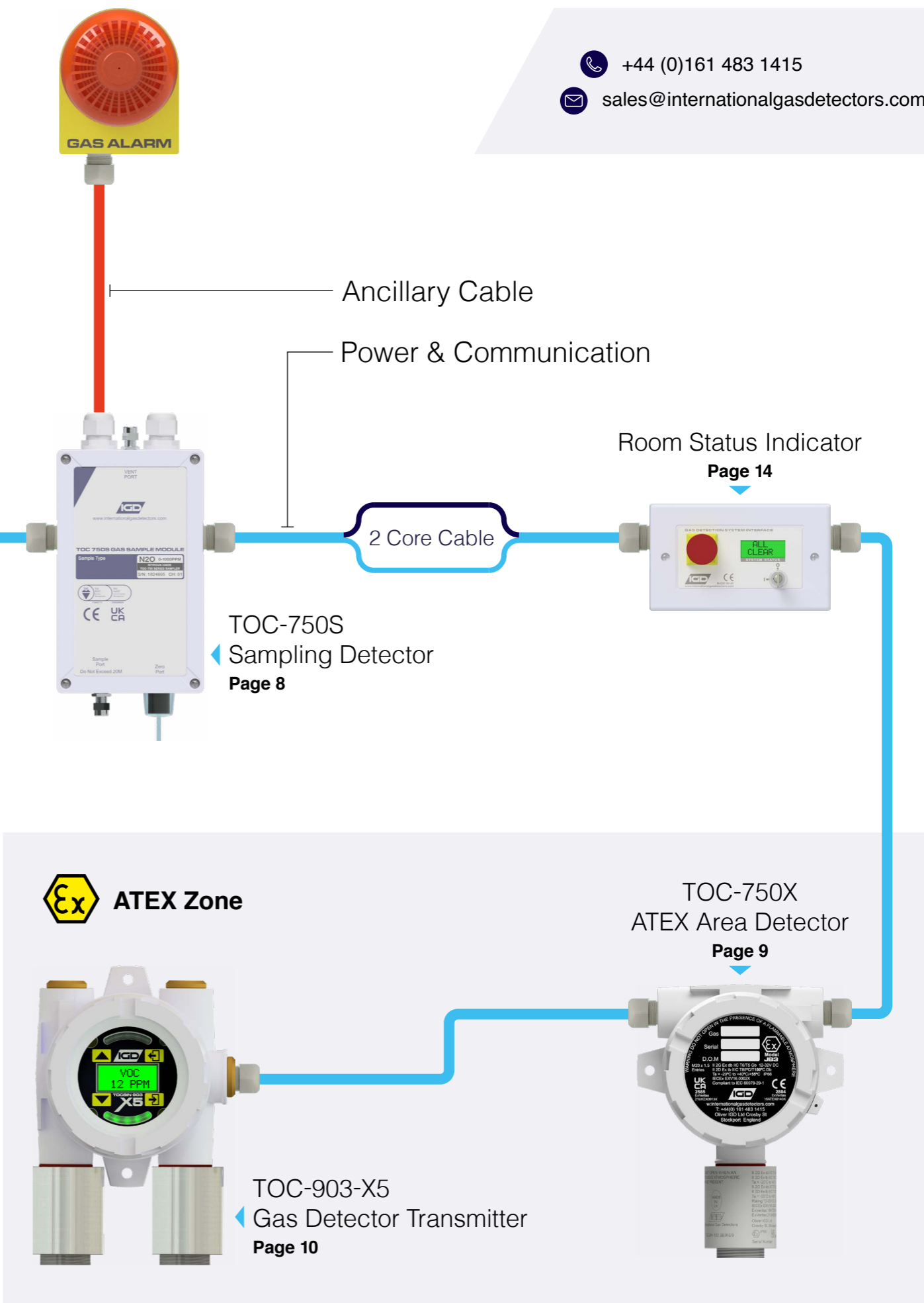
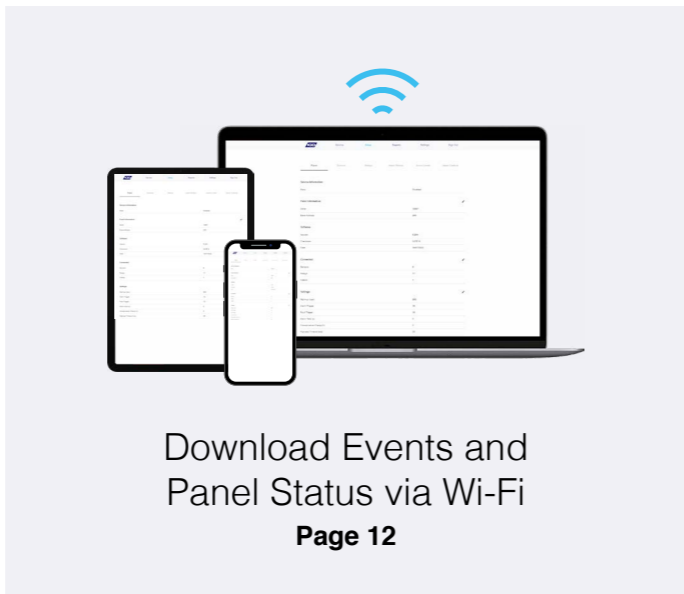
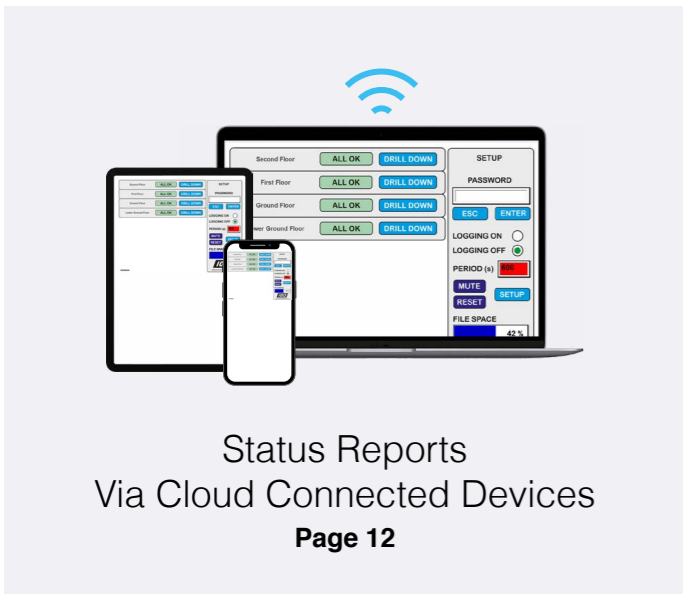
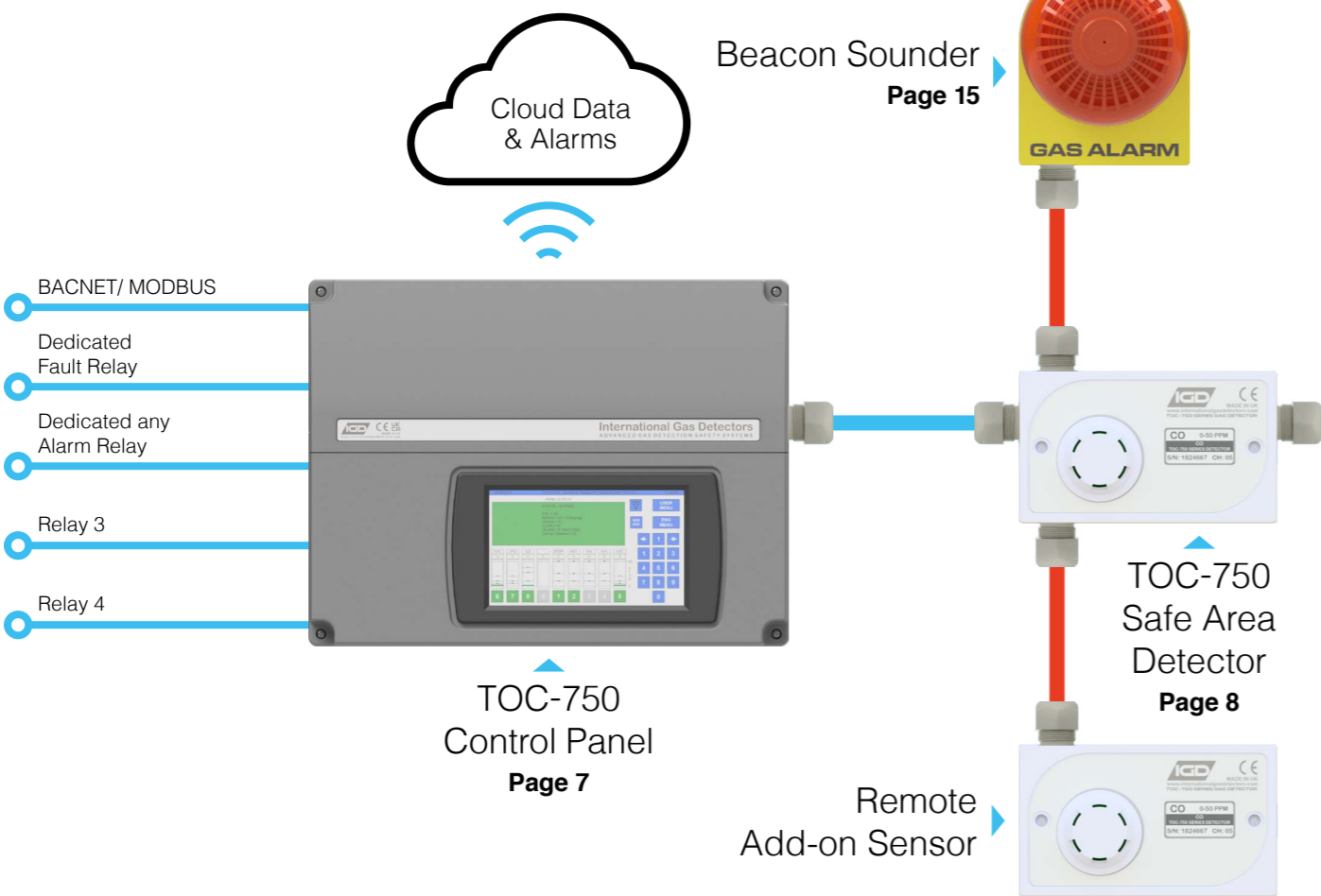
- |                   |               |
|-------------------|---------------|
| + BS EN 60079-1/0 | + EN/UL 61010 |
| + IEC 60079-1/0   | + CSA C22.2   |
| + EN 50270        | + EN 50545    |
| + EN 60079-29-1   | + EN 378      |
| + IEC 60079-29-1  | + EN 50194    |
| + IEC/EN 60529    |               |



## Accreditations



# Example Addressable System



# System Controllers

## Control Panels



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 sales@internationalgasdetectors.com

All IGD Control Panels...



TOC-635 Control Panel



TOC-635 Control Panel

TOC-650 & TOC-750 Control Panels



TOC-650 Control Panel



TOC-750 Control Panel

### Features & Benefits of all IGD Control Panels

- + One-click system set up
- + Clear audible and visual alarms
- + Colour-changing display for status alerts (green for normal operation and red for alarm)
- + Battery backup option available
- + Status reports via Wi-Fi embedded pages
- + BACNET/MODBUS and 4 relay outputs
- + Certified to IEC 60079-29-1
- + Certified to UL 61010-1, CSA C22.2

### Features & Benefits

- + Connect 1-32 detector nodes
- + RGB 2x8 display
- + Illuminated jog wheel for navigation
- + Small footprint, smaller than an A4 sheet
- + Suitable for small to medium-sized applications

### Features & Benefits

- + Connect up to 128 detector nodes
- + 7" colour HMI (TOC-750) or RGB 2x8 (TOC-650) display
- + Connect up to 350 devices (gas detectors, ancillary and third party)

Fixed Detectors

Safe Area

Fixed Detectors

Samplers

Fixed Detectors

ATEX Area

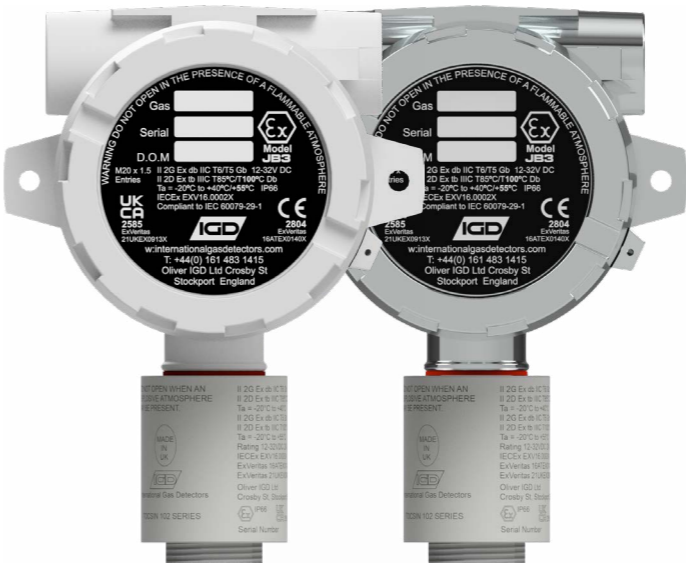
TOC-750 Safe Area Detector



TOC-750S Sampling Detector



TOC-750X ATEX Detector



Aluminium Alloy      Stainless Steel

EMS ATEX Sampler



Features & Benefits

- + Ideal for non-ATEX applications
- + Unique labyrinth sensor design for protection and longer sensor life
- + Precalibrated and plug and play sensor fronts with auto-gas recognition
- + Sensor options for over 700 gases and vapours
- + Enhanced ABS housing design
- + Multiple I/O points per detector
- + Certified to UL 61010-1, CSA C22.2
- + Certified to EN50194 for flammables

Features & Benefits

- + Unique piezo pump technology has almost no moving parts and a near silent operation
- + Auto-zero function or auto-cal for oxygen
- + Up to a 20-metre sample line
- + Near continuous detection
- + Constant flow monitoring
- + 1 Litre a minute sample rate
- + Ideal for hard-to-access areas, heights or clean room environments, etc.

Features & Benefits

- + IP68 Rating
- + Available in aluminium alloy or stainless steel
- + Sensors for over 300 gases and vapours
- + ATEX Zone 1 and 2 hazardous environments and zone 21 and 22 ATEX dust environments
- + Industry-leading long-life sensor technology
- + Pre-calibrated sensors
- + Sentinel+ addressable
- + Certified to EN/IEC 60079-0:2017
- + Certified to EN/IEC 60079-1
- + Certified to IEC 60079-29-1:2016 for flammables

Features & Benefits

- + Eductor Modular Sampler (EMS) for use in ATEX-rated zones
- + Attach to any IGD ATEX detector
- + Flow fail monitor
- + Can sample up to 2 Litres a minute
- + Sample line up to 50 metres long
- + No moving parts, uses compressed air

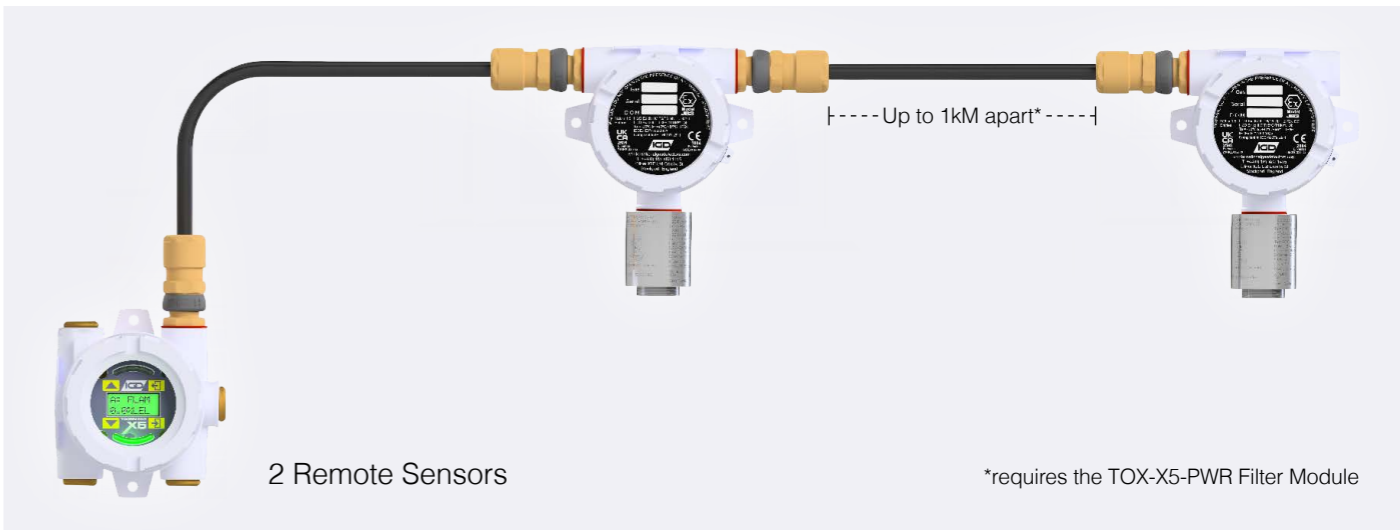
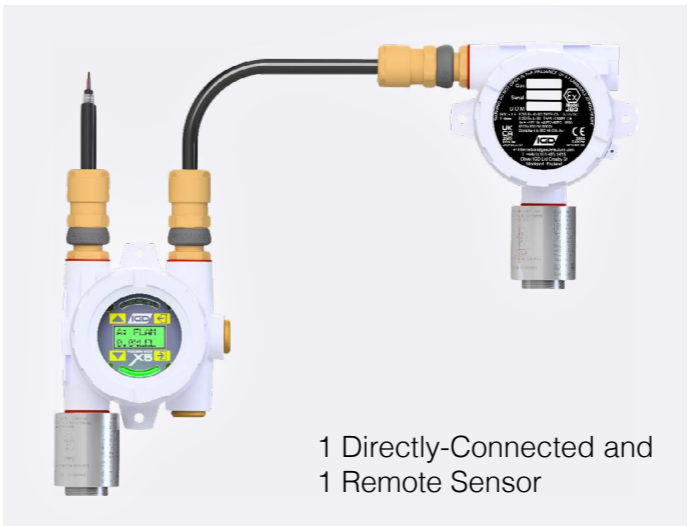


TOC-903-X5 Detector Transmitter



Features & Benefits

- + IP67 Rating
- + ATEX/IECEx zone 1 and 2 hazardous environments and zone 21 and 22 ATEX dust environments
- + One-person, non-intrusive calibration with a magnetic stylus
- + Can act as both a gas detector and a control panel
- + 5-Port housing for multi-point detection
- + 2x 4-20mA outputs, 3x Relay outputs, 1x 2-Wire addressable connections, communication and power
- + Directly connected or remote sensor configurations (see page opposite)
- + IGD's leading long-life sensor technology
- + Dual, plug and play sensors with a choice of over 300 gases and vapours
- + Certified to IEC EN 60079-1:2017
- + Certified to IEC EN 60079-0:2016
- + Certified to IEC EN 60079-29-1 for flammables (pending)

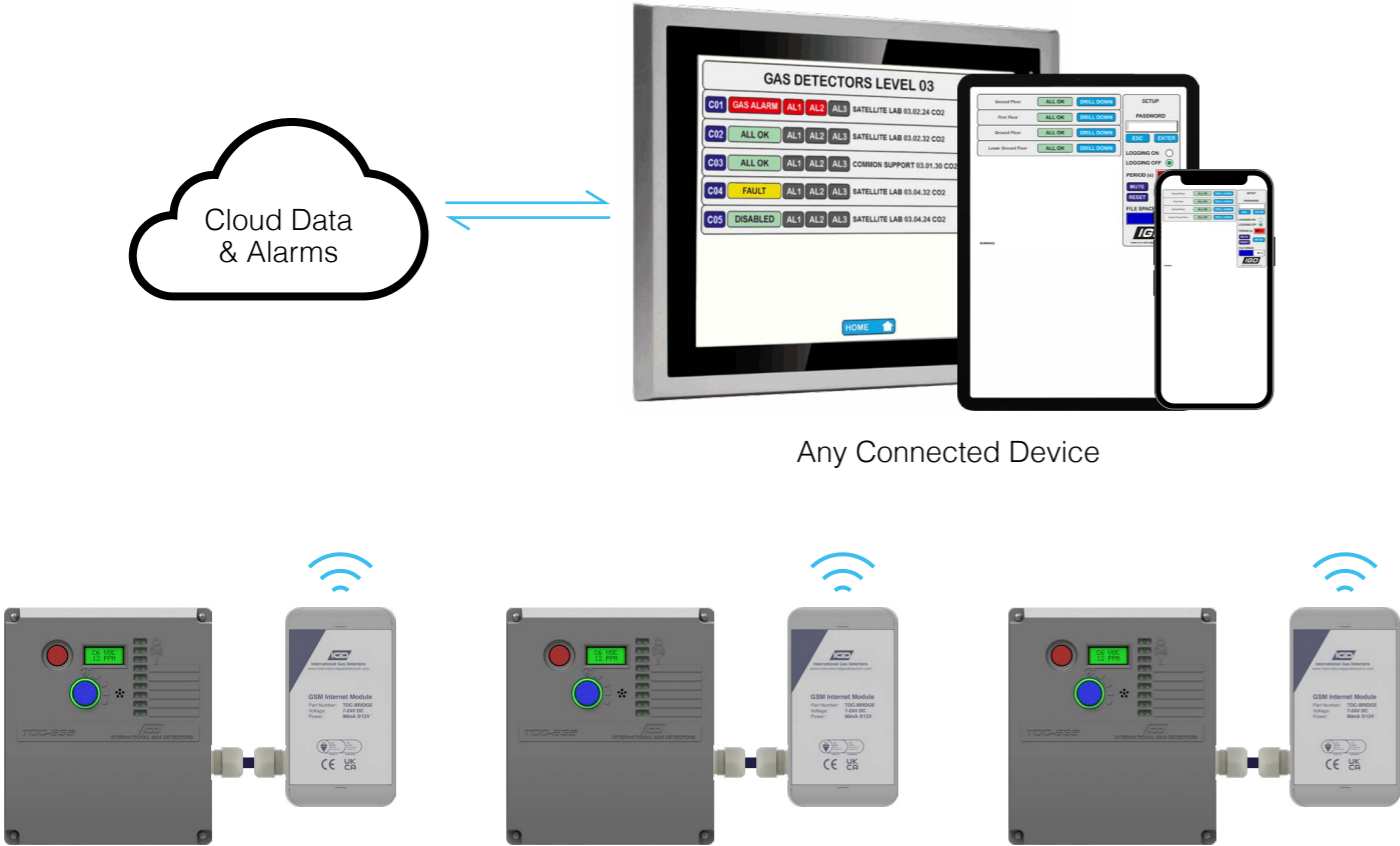


\*requires the TOX-X5-PWR Filter Module

# Remote Monitoring & Wi-Fi Options



## Remote Monitoring



### Features & Benefits

The TOC-635 PLUS, 650 and 750 controllers can be equipped with cloud-based data acquisition, allowing clients to remotely access alerts and live gas readings.

- + View live readings, remote calibration, monitoring and alarm notifications
- + Fast response
- + Monthly subscription
- + Remote monitoring to any internet-accessible mobile device
- + Router connects to panel via a Netburner module

## Auto-Dialler Module



### Features & Benefits

- + Accepts up to 9 inputs
- + Pre-recorded messages via phone calls or text-based alerts
- + Receive status alerts
- + Uses a secure M2M SIM card

## GSM Module



### Features & Benefits

- + Accepts up to 4 text contacts and email addresses
- + Communicates directly with the control panel
- + Receive event notifications by text and email
- + Receive a full log for up to 1,000 events by text and email
- + Receive periodic gas reading snapshots via text and email
- + Uses a secure M2M SIM card



Room Status Indicator (RSI)

HMI Display

Beacon Sounder

Accessories



Splash Guard  
for Increased IP protection, available  
in Safe Area and ATEX Versions



Alarm Call Point



Gas Collector Cone  
with Remote Gassing Point Options  
for Lighter than Air Gases

Features & Benefits

- + IP54 Rating
- + Made from corrosion-resistant ABS
- + Colour-changing display for status alerts (green for normal operation and red for alarm)
- + E-stop, mute reset and key switch options available
- + 85dB Alarm sounder
- + Made from ABS
- + 2-Line, 7-Digit LCD Display
- + 0° to 55°C Operating temperature
- + Live readings for up to 8 detectors or devices

Features & Benefits

- + IP66 Compliant front bezel
- + Displays live device readings, alarm and fault status
- + Dashboard to interrogate the connected gas detection systems
- + Scratch and shatterproof, 15" colour touchscreen display
- + Live data logging and trending for each sensor
- + Cloud-based data acquisition
- + Up to 64 connected IGD gas detector control panels and 8,000 devices
- + Reset and mute alarms remotely through the HMI panel

Features & Benefits

- + IP65 Rating
- + Combined audible and visual alarms
- + Alarm sounds up to 106dB
- + Flame retardant polycarbonate
- + Provided with a laser-engraved label
- + Connect multiple beacon sounders together

Portable Gas Detectors  
**SENKO Collection**

All of our Portable  
Gas Detectors  
come with Online  
Training & Support



+44 (0)161 483 1415  
sales@internationalgasdetectors.com

All SENKO Portables...

MGT Multi Gas Portable Detector

SGT-P Single Gas Portable

iGAS CO2 Portable Detector



Features & Benefits of all SENKO Portables

- IP Rating:** 66
- Warranty:** 2-Year from date of purchase
- Calibration:** Traceable calibration and service from IGD
- Alarm:** Customisable alarms  
Clear audible, visual, and vibration
- Event Log:** 30 Most recent events
- Operation:** 1 or 2-Button

Features & Benefits

- Rating:** ATEX/IECEX, Intrinsically Safe, CSA, UL and InMetro Approved
- Battery:** Rechargeable, 2-Month (IR Version)  
Rechargeable, 18 Hours (Pellistor Version)
- Sensors:** Carbon Monoxide, flammable gases, Hydrogen Sulphide and Oxygen Depletion or Enrichment

Features & Benefits

- Rating:** ATEX/IECEX and Intrinsically Safe
- Battery:** Replaceable, 2-Year
- Sensors:** Hydrogen Sulphide, Carbon Monoxide, Sulphur Dioxide, Hydrogen Gas, Oxygen, Ammonia

Features & Benefits

- Rating:** Industrial
- Battery:** USB Rechargeable, 14-Day Runtime
- Sensors:** Low-power NDIR (Non-Dispersive Infrared) Sensor  
%VOL or PPM Measurement Options

# Portable Gas Detectors mPower Collection

All of our Portable Gas Detectors come with Online Training & Support



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## POLI Multi Gas Portable Detector

## UNI Single Gas Portable

## NEO PID Portable Gas Detector

## NEO PID Benzene Portable



### Features & Benefits

**Rating:** IP65, ATEX & Intrinsically Safe  
**Battery Life:** Rechargeable, 16-Hour lithium-ion  
**Warranty:** 2-Year  
**Alarm:** 95dB Audible, 360° light, vibration  
**Datalog:** 6-Month  
**Outer:** Durable double shot case  
**Sensor:** Up to 5 gases on one detector  
Over 35 options for gases and vapours  
**Operation:** 2-button  
**Optional:** Pumped and diffusion version

### Features & Benefits

**Rating:** IP67, ATEX & Intrinsically Safe  
**Battery Life:** Replaceable, 3-Year  
**Warranty:** 2-Year  
**Alarm:** 95dB Audible, red LED light, vibration  
**Datalog:** 50-Event  
**Outer:** Durable Housing  
**Sensor:** Wide range of sensors available  
**Operation:** 2-button

### Features & Benefits

**Rating:** IP66/67, ATEX & Intrinsically Safe  
**Battery Life:** USB Rechargeable, 24-Hour Li-Ion  
**Warranty:** 2-Years  
**Alarm:** 95dB Audible, red LED light  
Pump blockage notification  
**Datalog:** 12-Months data log at one minute intervals (500,000+ points of data)  
**Outer:** Rugged stainless steel and rubber  
**Sensors:** Photoionisation  
**Connectivity:** Bluetooth

### Features & Benefits

All of the benefits of the regular NEO PID plus...  
+ Benzene specific applications to detect 5ppb and up to 200ppm

### POLI & UNI Docking Station

- + For UNI and POLI mono calibration
- + Wide range of solutions in one device
- + Semi-automated calibration, bump testing, data downloading and uploading of instrument configurations in an easy-to-use device
- + Stores over 2,000 bump test or calibration records
- + Transferable to a USB device



### POLI Hard Carry Case

- + Perfect for transporting the POLI on the go
- + Hard outer shell
- + Pre-cut foam to hold the POLI and accessories securely



### POLI Sample Probe

- + For extended sampling with the POLI
- + Extensions to detect up to 30 metres away from the device
- + Perfect for confined space pre-entry checks



### Benzene Pre-Filter Tubes

- + For use with the Benzene NEO PID Detector
- + Includes 10 pre-filter tubes
- + Each filter can be once
- + Perfect for a wide range of hazardous applications



### SGT & MGT Docking Station

- + Bump test and calibrate up to 4 devices simultaneously
- + Simultaneously test each portable for 3 minutes and 40 seconds
- + Easy data downloads and automatic certifications
- + Take the hassle out of testing and calibrations



### IR Link

- + Data logging on any SGT or MGT portable
- + SENKO software provided to access records and event logs
- + Connects to one portable at a time



### 5 Way MGT Charging Station

- + Holds 5 MGTs for simultaneous charging from a single power supply
- + Quick and easy charging



### Vehicle Charger

- + For use with any car cigarette lighter socket





## Gas Detection Service

All gas detection systems, fixed or portable, must be regularly maintained, calibrated and tested to ensure correct operating and compliance.

The service and maintenance we offer is carried out in accordance with BS EN 60079-17 and UK PUWER.

IGD offer a wide range of competitive maintenance services that can be tailored to suit your specific requirements:

- Gas detection system installation by our in-house NICEIC approved and CompEx certified by our installation teams
- Gas detection system commissioning by our trained & competent engineers
- Flexible fixed & portable gas detection service contracts

The flexibility of our IGD Aftercare+ team ensures your site requirements are fulfilled. This could be supporting your installation team, providing turnkey project solutions, comprehensive training or ongoing maintenance contracts.

We pride ourselves on providing Detectably Better Aftercare.

## IGD Training

At IGD we believe it's important to understand the fundamentals of gas detection, why it's needed, and how to safely operate our equipment.

We pride ourselves in providing Detectably Better support, so we created a free training academy which is externally approved by the training body CPD UK.

Our training modules are adaptable to meet your application and industry, this flexible approach means we always provide above-industry standard training.

Training options include:


- Online courses to understand the basics of gas detection and hazards
- Onsite system handover training
- Owner operator training
- Portable gas detector training
- IGD Aftercare approved service training

When you purchase gas detection equipment from IGD, you can rest assured that you always have the best training straight from the manufacturer.





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Triton House, Crosby Street, Stockport, SK2 6SH

“After working with IGD on what was an initial gas detection system; the service levels, price and delivery has always been excellent. The support from IGD has been a huge help in getting the most out of the equipment.”

**Peter – Experts Safety Compliance**

“Our partnership with IGD enables our company to take advantage of innovative technologies in gas detection systems and offer our customers reliable and cost-effective solutions that precisely meet their requirements.”

**Ing, Dusan Vavera – Coup Ostrava**

“Super efficient gas detection service. The service of our gas detection system by IGD was excellent. The whole process was dealt with efficiently.”

**Stephane - Lab Manager - FAAM Labs**



A Member of  
**safe monitoring group**