A high quality provider of a wide range of Innovative Life Safety and Asset Integrity Solutions on and offshore.
Why Tyco?

Tyco are leaders in fire protection, safety and control systems, we help save life, property and the environment with a broad range of fire and safety solutions on land, at sea and in the air for just about every market sector imaginable.

In the UK our Oil, Gas and special hazard businesses are located in Aberdeen, Manchester and Great Yarmouth with dedicated professionals focused on harsh and high hazard environments both on and offshore. We have the widest range of fire and life safety products, which we are able to service on site (both on and offshore) and we have service and repair workshops in all three of our locations.

How We Operate

// Multi-dimensional and unrivalled in terms of services & products offered from; fires, safety and control solutions

// Products & services tailored to meet specific needs through one central point of contact

// With an integrated maintenance approach, Tyco provide consolidated support on the range of services required, thus ensuring we provide you with value for money, without compromise to the quality of service delivered.

// Providing specialist engineering services to safety critical environments.

// ISO & OHSAS accredited with regard to health & safety, quality & environmental approvals (certificates available on request).

Areas of Expertise

// Consulting Services

// Conceptual, Feasibility and Pre-Engineering Studies

// Project Management Detailed Design, Manufacture and Installation

// Full Turnkey Contractual Responsibility

// Commissioning Training

// On-going 24hr Service and Maintenance Support

// Inspection and Testing

Products & Services

// Fire Protection and Suppression

// Fire and Gas Detection and Alarm

// Detection & Control

// Heating, Ventilation and Air Conditioning

// Environmental Solutions

// Audio Communications

// Metering

// Fire, Safety & Risk Engineering

// Wellhead Process Control

// Chemical Injection

// Deluge Verification

// De-scaling

// Interface Engineering

// Fire & Safety Product

Tyco Installation & Service

Tyco’s Oil and Gas Business has the capability, expertise, resource, experience and history to provide individual or fully integrated maintenance programmes to support all types of onshore and offshore Oil and Gas assets globally.

Introduction to Portable Gas Detection

Portable Gas Detection

This product catalogue is dedicated to Portable Gas Detection products and service.

For over 40 years Tyco have and still do have specialist’s focused on Portable Gas Detection, new product, commission, install, service, recertification and hire of Portable Gas Detection within our 3 locations Aberdeen, Manchester and Great Yarmouth.

Tyco have the capability and experience to provide an in-house manufactured solutions through our sister company Tyco Gas and Flame. We also have a 20 years relationship as a premier distributor for Crowcon Gas Detection, as well as being an authorised service centre for other manufacturers such as Draeger, MSA, Scott Safety GMI, Honeywell.

Tyco hold extensive Crowcon and Tyco stock and can supply both single and multi gas monitors, for personal use and portable safety applications, providing protection against a wide range of industrial gas hazards, meeting your needs to cover all aspects of gas detection monitoring.

Handheld portable gas monitors vary in size and have different features, advantages and benefits and are all fully ATEX approved.

Our extensive Crowcon hire fleet are readily available 24/7. This can be beneficial to utilise when your units are offsite for repair calibration purposes or should you require additional monitors to your current fleet for short term projects.

We commission, install and service fixed gas detection systems and have a team of experts who can be contacted to discuss any requirement you may have.
The Crowcon T4 integrates innovative safety features and an intuitive, rugged design to provide advanced protection for those working in harsh environments. This portable multigas detector, which is exceptionally easy to use and service, protects against the four most prevalent gas hazards: carbon monoxide (CO), hydrogen sulphide (H2S), flammable gases and oxygen (O2) depletion.

**T4 Features**

**TWA Resume function**
Unique to T4, this innovative feature ensures toxic gas exposure is calculated accurately over an entire shift, even if T4 is switched off for a break or during travel to another site.

**24 hour battery life**
Safely work multiple or longer shifts between charges, covered by the exceptional 24 hour battery life.

**Backlit display**
Large, clear display with backlight and option to flip the screen 180° for easy viewing whilst worn.

**Rugged design**
With a thick anti-shock rubber casing and drop tested to 4 metres on concrete, T4 provides dependable operation under the most demanding use. Water & dust resistant to IP65 & IP67.

**Intrinsically safe**
Approved for ATEX Zone 0 and UL Class 1 Div 1 for operation in the widest range of environments.

**Dedicated sensors**
One sensor for every gas ensures effective, fast and reliable detection.

**Multiple alarms**
Audible 95dB alarm, bright red/blue LED’s and vibrating alerts provide effective warning to gas hazards.

**Easy operation**
Large single button and intuitive menu system minimise training and allow easy operation whilst wearing gloves.

The red line on the graph shows workers with other detectors risking overexposure to hydrogen sulphide (H2S) by switching their detector off for a lunch break.

Only T4 provides the option to include previous measurements in the calculation when you switch your detector back on again and so prevent you exceeding your exposure limit. Because of TWA Resume (green line), T4 alarms at 14:00 when their 8 hour TWA reaches 5ppm.

**Positive Safety Indicator**
A simple ‘traffic light’ status indicator which, at a glance, provides visual assurance of operational and compliance status to both users and supervisors.

* Patent pending - UK patent application number 1501699.1

For bump testing and calibration of T4, see Crowcon I-Test on p20.
Portable Gas Detectors Multi Gas

T4
// New addition to the portable range
// Carbon monoxide, hydrogen sulphide, flammable gases and oxygen depletion
// Robustness and low cost of ownership
// Front mounted, backlit. Optional 180° flip for easy viewing whilst worn
// Comes with accessories
// IP67

Gas-Pro
// Easy to see top mount backlit display, single button operation
// Detection of up to 5 gases in a compact, rugged solution
// Automatic fail safe flow plate recognition
// Specific and unique pre-entry mode
// +ve Safety™ tri-colour status indicator
// Integral over moulded anti-shock case
// Portable, wall and desk mount gas test solutions

Tetra:3 (T3)
// Up to 4 gas capability
// Single button operation for all functions, can be operated with gloved hands
// Rugged impact resistant design provides extra shock and vibration protection
// Reliable Lithium-ion battery provides over 16 hours continuous operation
// Water and dust resistant to IP67
// Loud 95dBA audible alarm, vibrating alarm, dual colour red/blue visual alarm
// Top mounted, backlit display
// This is an accessory that can be bought together with Tetra:3 (T3) Gas Bump Tester

Triple Plus+
// Up to 4 gas capability
// Interchangeable sensors allows full flexibility
// Large simultaneous four gas display with backlight
// Loud audible alarm, bright visual alarm
// Full timed data-logging file with 100 hour capacity
// A choice of reading 12 flammable gases through menu selection

Triple Plus+ IR
// Up to 4 gas capability
// Single IR 0-100%LEL Methane sensor with the capacity to fit three other sensors
// Dual range IR 0-100% LEL/Vol sensor with the capacity to fit two other sensors
// Ideal for purging applications
// Large simultaneous four gas display with backlight
// Loud audible alarm, bright visual alarm
// Full timed data-logging file with 100 hour capacity

Detective+
// Portable area monitor with up to 4 gas capability
// Ultra-loud 100 dBA sounder and red LED cluster alarms
// Wide range of sensor options including infra-red
// Long 36 or 60 hour battery life
// Raised detectors, coupled with IP65 provides excellent sensor protection
// Built-in pump option to provide faster gas response
// Ability to link up to 12 Detective+ monitors together with the use of interconnecting leads
Portable Gas Detectors Multi Gas

**GMI PS200**
- 4 gas unit
- Robust design
- Suitable for various confined space and industrial applications
- PS200 supported accessories include: calibration station, test gas, carry cases, rubber boot cases, pumped or non-pumped setting, aspirator hoses and multi chargers.

**GMI PS500**
- 5 gas unit
- Robust design
- Suitable for various applications
- Accessories available

**GMI Gasurveyor 500. Gas Industry Standard Portable Monitor**
- Auto Bump and Calibration Station (Accessory)
- Multiple Modes Including: Combustible Gas Indicator, Confined Space Monitor, Purge and Sweep
- Offering highly accurate and reliable instrumentation in an extremely robust, anti-static case, the Gasurveyor
- 500 Series measures combustible gases (ppm, %LEL, %Volume) in many applications and optionally O2, CO and H2S
- Configurable operation, auto ranging, internal sample pump and data logging
- Gases Detected: CO, H2S, combustible (ppm, LEL, % Volume), O2
- Sensor Technologies: electrochemical, catalytic, semiconductor, thermal conductivity
- Battery Life: 15 hours 4 ‘D’ size alkaline or 9 hours rechargeable battery pack
- Alarms: highly visible flashing LED, typically 85dB audible @ 1 m
- Approvals: ATEX • CE • IECEx • CSA • UL • MED

**Scott Protege Gas Detector**
- Up to 4 gas capability
- Easy to use, tough and robust construction
- 2 button control for one hand operation
- Standard alarm includes bright red dual flashing alarm bars
- 90dB audible alarm and internal vibrating alarm
- Option of external pump available
- Approved to: IP67 protection, ATEX
Portable Gas Detectors Multi Gas

Altair 2X, 4X & 5X instruments all have MSAs unique MotionAlert (man down alarm) which will activate if no movement is detected for 30 seconds

ALTAIR® 2X Gas Detectors

ALTAIR 2X line of Gas detectors from MSA; the first one-or two-gas detector that incorporates industry-leading XCell Sensor technology

// Altair 2XP Gas Detector with XCell Pulse Technology: H2S
// Features the first stand-alone bump test, which eliminates the need for bottled gas

ALTAIR® 4X Multi Gas Detector

// Sensor response and clear times under 15 seconds
// Bump test under 15 seconds
// Span calibration time under 60 seconds
// Greater signal stability and repeatability under changing or extreme environmental conditions
// The digital output of the sensors makes them much less susceptible to RF interference
// Two-tox CO/H2S sensor with virtually no cross-channel interference
// Two-tox CO H2-RES/H2S sensor with very low cross-sensitivity to Hydrogen <5%
// Two-tox CO/H2S-LC sensor for better performance at lower H2S concentration
// First Two-tox CO/NO2 and SO2/H2S-LC sensors with such an extended typical life
// Typical life greater than four years
// Laser-welded sensor housings eliminate opportunities for leaks
// Proprietary operating mode of the combustible sensor helps it stand up to poisons over the life of the sensor
// End-of-sensor-life indicator gives advanced warning to user, eliminating service outages

ALTAIR® 5X Multigas Detector

// Up to 6 gas capability
// MotionAlert & InstantAlert alarm for additional safety
// Triple Alarm System
// Super bright LEDs on the detectors top & bottom
// Audible alarm of 95dB at 30 cm
// Strong vibrating alarm as standard
// Full graphical monochrome or high res colour display
// 24 hour bump-test check mark
// Rugged rubberised housing
// Approved to: IP66 rated by a third party standard with Bluetooth functionality
// IR – 100% vol methane sensor (for inert applications)
// PID sensor for VOC detection

BW GasAlert MicroClip XT

// IP68 – for maximum water and dust protection - up to 45 minutes at a depth of 1.2 metres
// All-new Oxygen sensor that operates consistently for 5 years – with no replacement costs for the life of the detector
// 3 year warranty with an expected service lifetime of 5 years
// Extended 18 hour battery runtime with 1 button operation
Portable Gas Detectors Multi Gas

X-am® 2500 MSHA Approved
- Especially developed for use as personal protection.
- The 1 to 4 gas detector reliably detects combustible gases and vapours, as well as O2, CO, NO2, SO2 and H2S.
- Reliable and fully mature measuring technology, durable sensors and easy handling guarantee a high degree of safety with extremely low operating costs.

X-am® 5000
- Up to 5 gas capability
- Ergonomic and compact design
- 2 button control panel and user-friendly functionality
- Capability of 0 - 100% LEL and 0-100% Vol methane sensors
- Robust and water-tight
- Approved to: IP67 protection, ATEX, MED 96/98/EC

Portable Gas Detectors Multi Gas

BM25 Transportable Multi-Gas Detector (and BMS Wireless Series)
- The BM25 packs the benefits of a fixed-system area monitor into an easily transportable, yet rugged instrument.
- Designed for team protection or area surveillance, the unit is most suitable for perimeter monitoring, rig overhauls, and mobile or short-term work in areas where fixed detection systems are not suitable.
- The BM25 now features a wireless option using a 2.4GHz RF signal to transfer alarm and fault detection over a wireless mesh network.
- The wireless signal uses a mesh system to allow each unit to operate as a node able to receive, send and relay data to any other BM25 wireless unit, or control unit in range.
**Crowcon Gas Table**

<table>
<thead>
<tr>
<th>Single Gas</th>
<th>Multigas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Crowcon Portable Gas Detectors</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Crowcon Clip</strong></td>
<td><strong>Gasman</strong></td>
</tr>
<tr>
<td>Oxygen (O₂)</td>
<td>●</td>
</tr>
<tr>
<td>Hydrogen sulphide (H₂S)</td>
<td>●</td>
</tr>
<tr>
<td>Carbon monoxide (CO)</td>
<td>●</td>
</tr>
<tr>
<td>Carbon dioxide IR Cell (CO₂)</td>
<td></td>
</tr>
<tr>
<td>A wide range of hydrocarbons available (CAT LEL)</td>
<td>●</td>
</tr>
<tr>
<td>IR LEL</td>
<td></td>
</tr>
<tr>
<td>Dual range (0-100% LEL/0-100% Vol)</td>
<td></td>
</tr>
<tr>
<td>Ammonia (NH₃)</td>
<td>●</td>
</tr>
<tr>
<td>Chlorine dioxide (CIO₂)</td>
<td>●</td>
</tr>
<tr>
<td>Chlorine (Cl₂)</td>
<td>●</td>
</tr>
<tr>
<td>Sulphur dioxide (SO₂)</td>
<td>●</td>
</tr>
<tr>
<td>Hydrogen (H₂)</td>
<td>●</td>
</tr>
<tr>
<td>Nitric oxide (NO)</td>
<td>●</td>
</tr>
<tr>
<td>Phosgene (COCl₂)</td>
<td>●</td>
</tr>
<tr>
<td>Arsine (AsH₃)</td>
<td>●</td>
</tr>
<tr>
<td>Fluorine (F₂)</td>
<td>●</td>
</tr>
<tr>
<td>Phosphine (PH₃)</td>
<td>●</td>
</tr>
<tr>
<td>Hydrogen cyanide (HCN)</td>
<td>●</td>
</tr>
<tr>
<td>Hydrogen fluoride (HF)</td>
<td>●</td>
</tr>
<tr>
<td>Ethylene oxide (ETO)</td>
<td>●</td>
</tr>
<tr>
<td>Nitrogen dioxide (NO₂)</td>
<td>●</td>
</tr>
<tr>
<td>Ozone (O₃)</td>
<td>●</td>
</tr>
<tr>
<td>VOC gases (PID)</td>
<td>●</td>
</tr>
<tr>
<td>STEL/TWA alarms</td>
<td>●</td>
</tr>
<tr>
<td>+ve Safety</td>
<td>●</td>
</tr>
<tr>
<td>Pumped option</td>
<td>●</td>
</tr>
<tr>
<td>MED approval</td>
<td>●</td>
</tr>
<tr>
<td>Event logging</td>
<td>●</td>
</tr>
<tr>
<td>Data logging</td>
<td>●</td>
</tr>
<tr>
<td>Confidence beep</td>
<td>●</td>
</tr>
<tr>
<td>Single button operation</td>
<td>●</td>
</tr>
<tr>
<td>Testing station</td>
<td>●</td>
</tr>
<tr>
<td>Software for data management</td>
<td>●</td>
</tr>
<tr>
<td>Maintenance free</td>
<td>●</td>
</tr>
<tr>
<td>Non Rechargeable</td>
<td>●</td>
</tr>
<tr>
<td>Rechargeable</td>
<td>●</td>
</tr>
</tbody>
</table>

s = safe area applications

---

**Portable Gas Detectors Single Gas**

**Gasman**
- Intrinsically safe, compact and lightweight
- Versions available for flammable gas, oxygen or toxic gas
- Rechargeable versions for all gas types, non-rechargeable versions for oxygen and toxic gases
- Loud 95dBA audible alarm, vibrating alarm
- Dual colour visual alarm, red blue twin flashing LEDs
- IP65 ingress protection
- Gasman Diving version also available

**Clip**
- Reliable and durable fixed life monitoring
- Compact and maintenance free package
- Crowcon Clip has a 2 year life and
- Available for Hydrogen Sulphide (H₂S), Carbon Monoxide (CO) and Oxygen (O₂)
- Offers adjustable alarm levels and event logging with IR interface
- Gives real time gas reading or life left indication provides self-test and test due indication functionality
Portable Gas Detectors Single Gas

Scott Protege ZM
// Zero maintenance single gas solution
// Available in H2S, CO and O2
// 2 year operating life, no charging or calibration required
// H2S and CO models include hibernate feature to extend battery life
// 3-point alarm system including audible, visual and tactile alarms
// Customised LCD display can show operating life remaining, real time gas readings or both
// User configurable alarm set points, bump and calibration reminders
// Data logging capabilities
// IP66/67 rated enclosure

ALTAIR® & ALTAIR® Pro
// Robust, easy to grip design
// Easy to read display, highly visible LEDs
// Sensor options for H2S, CO and O2
// Simple bump check with checkmark for 24 hours
// Strong vibration and audible alarm of 95dB at 30 cm
// Provide 2 years or 1080 alarm minutes of service life under warranty
// The Pro version offer replacement parts to extend the life of the monitor
// Approved to ATEX II 2G EEx ia IIC T4 -20°C to +50°C

Galaxy GX2
// Takes care of all calibrations and bump testing
// Fleet management capability
// Easy to use keypad
// Robust design

All portable gas detection products shown in this catalogue are available with various accessories and spares – please call for more details / prices.
+44 (0)1224 295191 | www.tycoifs.co.uk
Intelligent Testing & Calibration Systems

GMI Calibration Station, PS200 Series
- Complete bump test and calibration functions
- Data recorder
- Wall mounting available / bracket
- Easy to use
- Available with various accessories

GMI Calibration Station, PS500 Series
- Complete bump test and calibration functions
- Data recorder
- Wall mounting available / bracket
- Easy to use

Calibration Station, PS1 Series
- Complete bump test and calibration functions
- Data recorder
- Wall mounting available / bracket
- Easy to use

Q-Test
- Suitable for in-field, on-site gas test, calibration configuration and data capture of Gaspro monitors
- Fast and simple to use
- Automatic detector recognition
- Exception reporting to highlight issues
- Fleet manager setting for site specific requirements
- Drive +ve Safety™, giving comprehensive status indication
- Data management via USB, Ethernet or direct to PC
- Save standard configurations to reduce time spent during set-up

Tetra:3 (T3) Gas Bump Tester
- Allows gas testing of Tetra:3 (T3) instruments fitted with flammable, oxygen, carbon monoxide, hydrogen sulphide and carbon dioxide sensors.
- Rugged and robust, fast and simple to use
- Bump all four gases in the instrument within 60 seconds
- Automatic detector and gas recognition
- Wall, desk, and DIN rail mountable
- Suitable for in-field and on-site gas testing
Intelligent Testing & Calibration Systems

UltraRAE 3000

I-Test & I-Test Manager

I-Test is Crowcon’s fully automated solution for testing and verifying that your Gas-Pro or T4 is in a compliant state to carry out your daily work. When the Gas-Pro or T4 are inserted into I-Test, no button presses are required and I-Test starts testing automatically. I-Test and the accompanying I-Test manager software make this as easy as can be, with a bump test taking less than 1 minute to complete. Please state whether your I-Test is for Gas-Pro or T4 when ordering.

// Mains powered, or battery back-up make I-Test suitable for on site or in the field
// Entirely self-contained requiring no additional equipment
// Can update Gas-Pro or T4 configurations
// Powerful support software makes configuring I-Test extremely easy.
// Recognises empty or expired cylinders, avoiding non-compliant bump/calibration gas
// Testing starts automatically when Gas-Pro or T4 are inserted, minimising user training
// A battery backup ensures testing continues even if the power is out
// Everything is logged and archived for full traceability
// Exceptional reporting provides precise reports on who has and hasn’t tested their unit
// Powerful reporting also makes easy work of pulling data summaries together

UltraRAE 3000

// Quick spot check monitor
// Compound-specific monitor
// Combination proprietary filter tubes and PID provides faster analysis
// Results obtained in seconds rather than minutes
// Can be adapted to become Benzene specific
// Detects Benzene down to 0.1ppm in 60 seconds
// Measures down to 0.1ppm and up to over 200 ppm Benzene
// Internal pump allows samples at 10m into a confined space
// 10 hours continuous operation

MicroDock II – Calibration and Bump Test system

// Fully automatic calibration and bump testing of BW Technologies by Honeywell portable gas detectors
// Automatically verifies performance of audible and visual alarm
// No computer required
// Reduces maintenance costs
// One base station with one AC outlet supports up to six modules to suit your application
Global Strength. Local expertise.
At your service.

Tyco’s full spectrum of Life Safety and Asset Integrity Solutions
// Fire and Gas Detection/Alarm
// Detection and Control
// Portable Gas Detection
// Interface Engineering
// Safety Products
// Fire Protection Systems
// Fire Safety Maintenance
// Deluge Verification
// Environmental/HVAC
// Descaling
// Audio Communications
// Fiscal Metering
// Wellhead and Hydraulic Process Control
// Security and Surveillance

<table>
<thead>
<tr>
<th>United Kingdom Oil and Gas Locations</th>
<th>International Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberdeen, Altens Tel: +44 (0)1224 295 191</td>
<td>// Europe</td>
</tr>
<tr>
<td>Great Yarmouth Tel: +44 (0)1493 440 500</td>
<td>– United Kingdom</td>
</tr>
<tr>
<td>Manchester Tel: +44 (0)161 455 4400</td>
<td>– Norway</td>
</tr>
<tr>
<td>Norwich Tel: +44 (0)1603 201 201</td>
<td>// Asia</td>
</tr>
<tr>
<td>Nottingham Tel: +44 (0)1159 040 404</td>
<td>– Seoul, Korea</td>
</tr>
<tr>
<td></td>
<td>– Busan, Korea</td>
</tr>
<tr>
<td></td>
<td>– Singapore</td>
</tr>
<tr>
<td></td>
<td>– China</td>
</tr>
<tr>
<td></td>
<td>– Malaysia</td>
</tr>
<tr>
<td></td>
<td>// Middle East</td>
</tr>
<tr>
<td></td>
<td>– UAE</td>
</tr>
<tr>
<td></td>
<td>– Kuwait</td>
</tr>
<tr>
<td></td>
<td>– Oman</td>
</tr>
<tr>
<td></td>
<td>// South America</td>
</tr>
<tr>
<td></td>
<td>– Brazil</td>
</tr>
<tr>
<td></td>
<td>// Africa</td>
</tr>
</tbody>
</table>

Contact us for further information on how we can help with your Life Safety and Asset Integrity Solutions tfis.marketing.uk@tycoint.com

www.tycoifs.co.uk