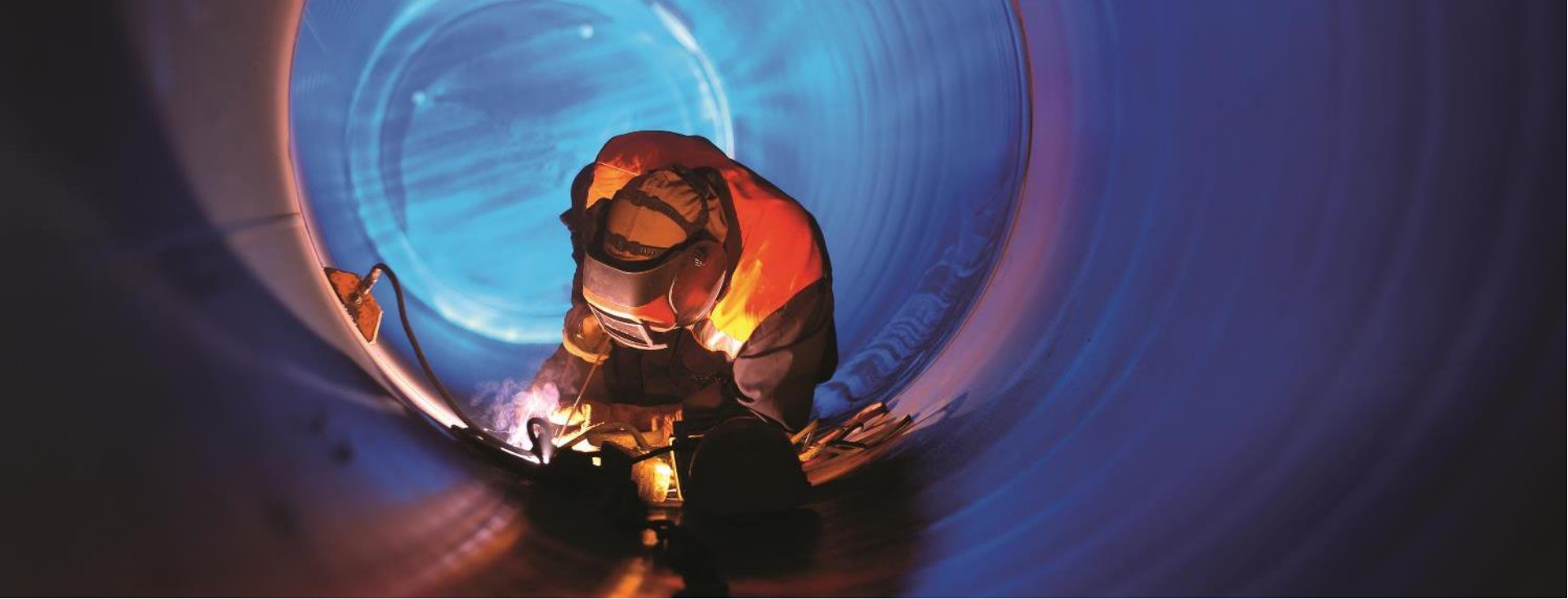


# Introduction to the Crowcon Portables portfolio

Updated: May 2019



## Crowcon Portable Gas Detection

Solutions to protect your workforce from flammable and toxic gasses utilising best in class technologies and decades of specialist experience



# Overview

# Portables range overview

Market Price ↑

- Single gas
- Disposable



Clip  
SGD



Gasman

- Single gas
- Rechargeable
- Many sensor options



T4

- Multi gas
- Standard 4



T3

- Multi gas
- Many Sensor Options



Gas-Pro

- 5 gas Multi gas
- Pump option
- Many Sensor Options



Gas-Pro TK

- Dual Range IR sensor Vol & %LEL
- Special Tank pre-entry mode



Detective+

- Temporary are monitor
- Loudest alarms
- Biggest battery
- Pumped option

# Key attributes and decision points



## Maximum number of gases detected

Maximum number of target gas types the product can detect.



## Minimum product weight

This represents the minimum weight of the product. Check the product specifications for variations depending on sensor type and additional built in functionality, such as pumps.



## Standard battery life

The standard operating life of the unit based on a full charge. If charged for a shorter time period the operating time may be reduced. Check product specifications for further details



## Single use

Non rechargeable, maintenance free products with up to 2 years life (dependent on alarm hours). Products may have replaceable batteries and can be re-used. See product specifications for details.



## Ingress protection level

The IP rating system provides a means of classifying the degrees of protection from dust and water afforded by electrical equipment and enclosures (BS EN60529).

**IP65** – Totally protected against dust ingress and low pressure water jets from any direction.

**IP66** – Totally protected against dust ingress and high pressure water jets from any direction

**IP67** – Totally protected against dust ingress and short periods of immersion in water.



## Pre-entry check function

An automated pre-entry check which guides users through the three specific functions of any pre-entry check (sample, review and purge) for a confined space application.



## Optional internal sampling pump

This product can have an optional electric pump built in for sampling functionality.



# Single Gas

# Clip SGD

## Personal Maintenance Free Single Gas Monitor



Clip SGD (Single Gas Detector) is designed for use in hazardous areas and offers reliable and durable fixed life span monitoring in a compact, lightweight and maintenance-free package. Clip SGD has a 2-year life and is available for hydrogen sulphide (H<sub>2</sub>S), carbon monoxide (CO) or oxygen (O<sub>2</sub>).

“Our Clip SGD reduces overheads by removing the need to charge & calibrate”

### Easy to maintain

Changeable alarm levels	Ensures compliance with changing regulations or company procedure
Clip SGD docking station	Keeps monitors correctly configured without service or technician team
'Bump test due' indication	Alerts the user and team members that the monitor is not compliant and requires a bump test

### User friendly

Compact and lightweight	Non-intrusive and comfortable to wear, perfect for any length of shift
Single button operation	Delivers simplicity for users Reduces training time

### Efficient

Wide operating temperature range	Effective in a wide variety of harsh environments
IP66 and IP67	

### Accurate

Countdown and real time readings available	0.1 resolution for hydrogen sulphide
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Available gasses: **O<sub>2</sub>** **CO** **H<sub>2</sub>S**

# Clip SGD

## Application showcase and Ancillaries

### Oil & Gas – Clip H2S

Clip SGD is perfect for use where high levels of H2S are present and you have large numbers of workers onsite at once, such as sour oil wells and onsite oil refining

### Maintenance and confined spaces – Clip CO & Clip O2

Oxygen depletion or CO leaks can and do occur in boiler rooms, plant rooms and other confined spaces worldwide. Clip is a great solution to protect your staff against these dangers

#### Clip SGD Docking Station

Clip SGD Docking Station provides bump testing, event management and calibration functions in a convenient portable format which can test up to 4 Clip SGD at once.

Clip SGD Docking Station is compatible with 60L gas cylinders. An internal rechargeable battery ensures Clip SGD Docking Station operates even during a power outage.



#### New IR Link

For PC communication with Clip SGD.





# Gasman

## Personal Rechargeable Single Gas Monitor



With impact resistant construction and compliance to IP65, the gasman is a designed to last. Full data capability allows customers to guarantee compliance and get deep insight into their processes. Gasman gives an unbeatable combination of powerful loud and bright alarms. It's stunningly compact and lightweight design makes it ideal for use in any situation

“Our Gasman is a full function device in a compact and lightweight package its perfect for customers who need more sensor options and data capability”

### Robust

Tough polycarbonate housing	Protects you in the harshest environments
Water and dust resistant to IP65	
Full overmoulding	High impact resistance

### Effective warning

2 levels of instantaneous alarm and TWA alarms for toxic versions	Ensures prompt evacuation from hazardous zone
95dB audible alarm	
Vivid twin red/blue visual alarm	If ambient noise is high, Gasman still alerts you by vibrating and with the high impact blue/red LED alarms
Internal vibrating alarm	

### Flexible

Versions available for flammable gas, oxygen and toxic gases	
Rechargeable versions for all gas types	
Non-rechargeable versions for oxygen and toxic gases	Gas detector tailored to your requirements
Real time TWA and peak display options	
Fully interchangeable intelligent sensor modules	

### User friendly

One button operation	Quick and easy to use
Backlit display for gas diagnostics and operating status	Easy to read
Ultra lightweight- just 85g for toxic versions	Comfortable to wear

Available gasses:

Flam

O2

CO

IR CO2

H2S

SO2

COCL2

PH3

O3

NO2

NO

HF

HCN

H2

F2

CL2

NH3

# Gasman

## Application showcase and Ancillaries

### Petrochemical

The wide range of sensor choice make gasman the go to point of call for petrochemical facilities where there are many non-standard exotic gas risks

### Brewery & Beverage

The IR CO2 sensor version of Gasman is perfect for use in pub cellars and other beverage situations where there is a high risk of CO2 exposure. Its fast and accurate response keeps staff safe at all times



#### Gas Test Kit - C01892

Allows calibration and gas testing. Includes – Trigger regulator with 1m gas supply tube, flow cap, magnet and 2m gas vent tube



#### Single Way Charger- C01941

Charger cradle. Select power supply option.



#### Leather carry case - C01983

Enables unit to be worn either on a belt or with a shoulder strap.



#### Gasman External Filter - C02132

For use in high dust environments such as steel plants.



#### Gasman Interface Kit Including Multi PSU - C011305

Gasman Interface Kit includes single way charger/interface, USB-RS232 adaptor, PC lead and multi-region PSU (Portables PC software CD [C01832] must be ordered separately)





# Multi Gas

# T4

## Personal 4-Gas Monitor



T4 gives customers compliance by integrating innovative safety features and an intuitive, rugged design to provide advanced workforce safety 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 (H<sub>2</sub>S), flammable gases (eg CH<sub>4</sub>) and oxygen (O<sub>2</sub>) depletion.

“Our T4 gives compliance to customers who want the 4 most popular sensor options and data capability, in a rugged, simple to operate device”

### 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.
18 hour battery life	Safely work multiple or longer shifts between charges, covered by the 18 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	Provides protection in the harshest environments.
Dedicated sensors	One sensor for every gas ensures effective, fast and reliable detection.
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. Green light - Working safely Red light - Attention required
Intrinsically safe	ATEX approved and UL Class 1 Div 1 for safe operation in a wide range of hazardous environments.
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.

Available gasses:

Flam

O<sub>2</sub>

CO

H<sub>2</sub>S

# T4

## Application showcase and Ancillaries

### Utilities

The T4 is perfect for utilities companies looking for a large fleet of devices with data capability to guarantee compliance for their workforce.

### Refineries

The popular and most prevalent 4 gasses feature on T4 and it is also rugged and hardwearing and available with a 10 way charger making it perfect for refinery use especially during shutdowns and turnarounds

### Steel plants

T4 can be supplied with a hydrogen immune CO sensor which is a perfect fit for steel plant applications where parts of the process involve Hydrogen and a regular CO sensor would be unable to function correctly



#### Bump/Calibration plate - T4-CAL-CAP

For applying test gas to T4



#### External filter plate - T4-EXT-F

Clip-on filter for additional protection in dusty environments. Protects the sensors from contamination



#### I-Test - IT-T4-11Z-ZB-X

Easy automated bump testing and calibration solution.



#### Cradle charger - T4-CRD

Docking station for easy charging. Includes multi region power supply.



#### 10 way charger - T4-TWC

Charge and store up to 10 units. Requires only a single power outlet.  
\*Not available for UL certified products.



#### USB communications lead - CH0103

For PC connection to T4



# T3

## Personal 4-Gas Monitor



Designed with the user in mind, the top mount display, full function data and event logs, audible, visual and vibrating alarms deliver top end performance. Gases include the most common four (carbon monoxide, methane, oxygen and hydrogen sulphide), also an expanded range: ammonia, ozone, sulphur dioxide, hydrogen filtered carbon monoxide (for steel plants), other flammable gases and IR carbon dioxide (for safe area use only).

“Our T3 gives customers gives customers access to the standard 4 gasses plus a wide selection of popular exotic gas sensor options perfect for customers with bespoke requirements”

### Robust

Rugged impact resistant design provides extra shock and vibration protection

Water and Dust resistant to IP65 and IP67

Can be submerged in water

Provides protection in the harshest environments

### Effective warning

95 dB audible alarm

Vivid red/blue visual alarm

Vibrating alarm

Ensures clear warning facilitating prompt evacuations from hazard zones

### Reliable

Proven sensor technology and software operation

Clear calibration-due warning

Lithium-ion battery provides 14 hours continuous operation from a single charge with no memory effects

Provides reliability you can trust and has the power to cover you for an extended shift

### User friendly

Single button operation for all functions

Top mounted, backlit display of all gas readings, diagnostics and battery life

Can be operated with gloved hands

'At a glance' operating status

Available gasses:

Flam

O2

CO

H2S

CO/H2S Dual

SO2

O3

NH3

IR CO2

# T3

## Application showcase and Ancillaries

### Clean Water & Utilities

The T3's extended range of gasses includes some which perfectly match the detection needs of clean water processes. It can also be configured for all of the most common utility area gasses

### Beverage & HOREGA

The T3's can be specified with an IR CO2 and O2 sensor configuration which is great for cellars and store rooms in the beverage and HOREGA sectors it protects against oxygen depletion and CO2 poisoning the 2 most prevalent hazards in those environments



#### T3 universal charger - C011149

Wall, desk or vehicle storage compartment mounting, holds T3 firmly for charging. With multiregion mains PSU (UK, EU, NA and Australian plugs included).



#### T3 Gas Tester

Wall mount gas test solution for CH4, O2, CO, H2S & CO2 configured T3s



#### Leather Carry Case - C011054

Enables unit to be worn either on a belt or with a shoulder strap.



#### External Dust Filter - C011055

For use in high dust environments such as steel plants



#### Gas Test Kit - C011062

Includes Crowmag, regulator, hose, flow plate.



# Gas-Pro

Premium Multi-gas Monitor with optional pump



Offering detection of up to 5 gases in a compact and rugged solution, Gas-Pro has an easy-to-read top mount display combining ease of use and user focused features.

An optional internal pump, activated with the flow plate, takes the pain out of pre-entry testing and allows Gas-Pro to be worn either in pumped or diffusion modes.

“Our Gas-Pro is for customers who require professional grade gas detection and process guidance by offering 5 gas support, a dedicated pre-entry check mode and optional pump feature”

## User friendly

Top mount display	Makes it easy to read at a glance
Simple single button operation	Can be used whilst wearing gloves
Intuitive functionality	Reduces training time

## Adaptable

Monitor 5 gases from many different options	
Pumped and diffusion solutions	Offers multiple uses within one compact detector
Multiple languages	
IR/PID options	Further protecting against a number of explosive gases and compounds
Automatic fail-safe flow plate recognition	
Specific and unique Pre-Entry Check (PEC) mode	Takes away the pain of pre-entry testing

## Reliable

Reliable lithium-ion battery	Provides over 14 hours use from a 7.5 hour charge
Water and dust resistant to IP65 and IP67	Capable of withstanding harsh environments
Bump and calibration reminders	Helps ensure full compliance at all times

Available gasses:

Flam | O2 | CO | H2S | CO/H2S Dual | NO | NO2 | ClO2 | Cl2 | NH3 | O3 | SO2 | CO2



# Gas Pro

## Application showcase and Ancillaries

### Confined Space Entry

Gas pro has a dedicated guided pre-entry check mode making it ideal for confined space entry usage. Keep your employee's safe and compliance high when entering confined spaces

### Marine

Our Gas Pro is fully MED certified making it a perfect fit for use on vessels of all types

### Utilities

The wider choice of sensors on Gas Pro make it ideal for some of the more specialised and bespoke processes in the utilities sector



#### Gas-Pro charger cradle - CH0105

Desk or wall mounted cradle for charging Gas-Pro



#### USB communications lead - CH0103

Enables communication with PC (non charging)



#### Gas-Pro Pumped flow plate - AC0100

Replacement flow plate for pumped Gas-Pro units.



#### Gas-Pro un-pumped flow plate - AC0101

Replacement flow plate for un-pumped Gas-Pro units.



#### 6m Drop line - AC0509

6m Drop line to enable pre-entry checks. Includes clip to attach to D-loop on detector.



#### Gas-Pro Hard shell case - AC0600

Includes custom foam insert with space for standard items – contents not included



# Gas-Pro IR

Premium Multi-gas Monitor with IR sensor and optional pump

**CROWCON**  
Detecting Gas Saving Lives



“Our Gas-Pro IR helps customers who require explosive gas detection in environments where traditional pellistor sensors would struggle by integrating a dual wavelength IR sensor which is immune from poisoning, works at high gas concentrations and responds instantaneously”

The Gas-Pro IR can detect flammable gasses like methane, pentane or propane using infrared (IR) sensor technology. The Gas-Pro IR is ideal for detecting potentially explosive gases where speed is essential and traditional, "pellistor", catalytic sensors would struggle – especially in a low oxygen environment or where pellistors could be poisoned .

Available gasses:

Flam

O2

CO

H2S

CO/H2S Dual

NO

NO2

ClO2

CL2

NH3

O3

SO2

IR CO2

# Gas-Pro IR

## Application showcase and Ancillaries

### Industrial

Gas Pro IR has an IR sensor that is immune from poisoning so perfect for use in industrial or inert environments where pellistors wont work. It also has a faster response rate than pellistors perfect when high concentrations are present and speed is essential.



#### Gas-Pro charger cradle - CH0105

Desk or wall mounted cradle for charging Gas-Pro



#### USB communications lead - CH0103

Enables communication with PC (non charging)



#### Gas-Pro Pumped flow plate - AC0100

Replacement flow plate for pumped Gas-Pro units.



#### Gas-Pro un-pumped flow plate - AC0101

Replacement flow plate for un-pumped Gas-Pro units.



#### 6m Drop line - AC0509

6m Drop line to enable pre-entry checks. Includes clip to attache to D-loop on detector.



#### Gas-Pro Hard shell case - AC0600

Includes custom foam insert with space for standard items – contents not included



# Gas-Pro PID

Premium Multi-gas Monitor with PID sensor and optional pump

**CROWCON**  
Detecting Gas Saving Lives



“Our Gas-Pro PID is a professional gas monitor that helps customers who require specialist VOC gas detection by integrating a photo-ionisation PID sensor”

Gas-Pro PID utilises the Photo Ionization Detection technology to allow you to detect hundreds of Volatile Organic Compounds (VOCs). If you are working in an environment that is high in levels of solvents, glues, paints and general VOCs, the Gas-Pro PID will monitor your safety. With its dual-coloured display, the monitor will alert the user with its 95db audible alarm and its dual-coloured visual alarm bars.

Available gasses:

Flam

O2

CO

H2S

CO/H2S Dual

NO

NO2

ClO2

CL2

NH3

O3

SO2

PID VOC

# Gas-Pro PID

## Application showcase and Ancillaries

### Petrochemical

Gas-Pro PID has an advanced Photoionisation sensor which allows it to detect a wide range of volatile organic compounds which are often present in chemical refining processes and production facilities which often use a variety of solvents



#### Gas-Pro charger cradle - CH0105

Desk or wall mounted cradle for charging Gas-Pro



#### USB communications lead - CH0103

Enables communication with PC (non charging)



#### Gas-Pro Pumped flow plate - AC0100

Replacement flow plate for pumped Gas-Pro units.



#### Gas-Pro un-pumped flow plate - AC0101

Replacement flow plate for un-pumped Gas-Pro units.



#### 6m Drop line - AC0509

6m Drop line to enable pre-entry checks. Includes clip to attach to D-loop on detector.



#### Gas-Pro Hard shell case - AC0600

Includes custom foam insert with space for standard items – contents not included



# Gas-Pro TK

Specialised Personal Tank Monitor with Dual Range IR sensor



Gas-Pro TK dual range portable monitor is ideal at any flammable gas concentration it uses the best sensor technology to reliably monitor inerted tank environments – dual IR. Gas-Pro TK is designed for use in this specialist environment where standard gas detectors just won't work, whether tank purging or gas freeing.

“Our Gas-Pro TK is a specialised tank monitor that is perfect for customers who want to purge, free or maintain storage and transportation tanks due to its integrated auto switching dual range IR sensor technology”

## Tank check functionality summary

Tank specialist	Designed to perform in the challenging inerted tank environments
Dual IR sensor	Detects the spectrum of possible flammable gas concentrations from high %vol to low %LEL. Auto-ranges, switching between %LEL and %vol as gas concentration demands. Notifies you of auto-ranging as it happens
Monitors oxygen	Know when it's safe to load fuel Know when it's safe for operators to enter
High H <sub>2</sub> S sensor option	Understand possible risks if gases vent during purging helps inform you of potential risk from pyrophores
Alarms disabled in tank mode	High gas levels are to be expected, so alarms can be misleading and annoying
Automatic flow plate recognition	Integrated pump turns on as soon as the flow plate is applied Tank samples can be drawn from up to 30m

## Safety

Mode indication	Clearly indicated when in Tank Check mode, avoiding potential confusion
Confirmed alarm status	In Tank Check mode, alarms are disabled. You must acknowledge this before you can proceed
Simple single button operation	Simple one-handed operation Easy to learn and remember Easy to use while wearing gloves
Light	At 340g, it is light enough to clip to your belt, overalls, or a Gas-Pro harness, so it's easy for the technician to keep with them during their working day
Black	Part of the Gas-Pro range of detectors, Gas-Pro TK units are black to avoid any possible confusion

## Personal monitor functional summary

Personal gas detector	Gas-Pro TK has full Gas-Pro functionality, so can double up as a personal detector, as required Full range of alarms are enabled: audible (>95dB); visual (red and blue flashing LED); tactile (vibrating)
Confined space pre-entry check function	Assists you through the pre-entry check process

Available gasses:

O<sub>2</sub>

CO

H<sub>2</sub>S

CO/H<sub>2</sub>S Dual

IR Flam LEL/VOL

# Gas-Pro TK

## Application showcase and Ancillaries

### Tank Farm

As a specialist tank monitor the Gas-Pro TK is designed with filling, purging and refilling tanks in mind. It is custom built for these tasks. It isn't inhibited by high hydrocarbon concentrations and it allows %vol readings as well as %LEL concentration. The perfect product for a tank farm of any size

### Marine Tanker Vessels

Tankers are regularly loaded, purged and unloaded and require a specialist monitor to perform these tasks safely. Tank pro is the ideal match thanks to its dedicated tank specific operating modes and Dual range IR sensor



#### Gas-Pro charger cradle - CH0105

Desk or wall mounted cradle for charging Gas-Pro



#### USB communications lead - CH0103

Enables communication with PC (non charging)



#### Gas-Pro Pumped flow plate - AC0100

Replacement flow plate for pumped Gas-Pro units.



#### 6m Drop line - AC0509

6m Drop line to enable pre-entry checks. Includes clip to attach to D-loop on detector.



#### Gas-Pro Hard shell case - AC0600

Includes custom foam insert with space for standard items – contents not included





# Temporary Area Monitor



# Detective+

## Temporary area monitor



Detective+ is a multi-gas temporary area monitor for use in turnaround/shutdown procedures, hot work maintenance, confined space entry work and many other utility, construction and oil and gas industry applications. Go solo or link together using Detective Net to form a perimeter, Detective+ gives a loud and clear alarm providing effective warning of gas hazards. The rugged, water and impact resistant design make Detective+ the ideal choice for your transportable gas detection needs.



“Our Detective+ keeps groups of workers safe during shutdowns and turnarounds or when fixed systems are down for maintenance due to its network functionality, heavy duty design and long lasting battery . Form perimeters with ease”

### Versatile and user friendly

Infrared sensors available	Allows sampling of highly flammable gas levels and carbon dioxide Unaffected by poisoning and has a very fast response time
Built in pump option	Provides sampling versatility
Built-in display	Provides clear information, allows identification of gas hazard

### Rugged, tripod design

Raised sensor apertures	Prevents water ingress
Triple leg design	Increases unit physical visibility and is the perfect height to allow 360 gas inlet
Folding leg option	Allows stacking for easier storage and transportation
IP65 specifications	Provides excellent sensor protection for use in challenging environments

### Loud and clear alarms

Network ready	Detective NET 25 units: 25 units can be networked together forming effective perimeter defence. When one alarms, all units on the network alarm. Detective+ with cables 12 units
Intelligent & flexible	Units on the network can be placed up to 100m from each other. When in alarm the unit which triggered the alarm flashes faster than the others
Audible and visible confidence blip	Provides guarantee to the user that the unit is functioning properly and that they are protected
High visibility	Vivid red LED clusters combine with an extra loud siren to give very clear alarm notifications
Multiple beacons	Ensures 360° visibility

Available gasses:

Flam	O2	CO	H2S	SO2	NH3	CL2	NO2	ClO2	H2	PH3	HCN	HF	C2H4O	IR CO2
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# Detective+

## Application showcase and Ancillaries

### Shutdown/Turnaround

Detective plus is a firm favourite for use during shutdowns and turnarounds where groups of people need to be kept safe and perimeters need to be created around certain areas or vehicles

### Chemical Spillage and response

The ability to create a perimeter with Detective+ units around an area is essential during a spillage and response incident

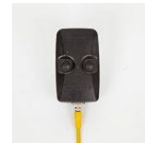
### Confined Space Entry

The pumped option on Detective plus makes it great for use as a confined space entry monitor that can be placed outside or on top of the entry point allowing remote monitoring of the confined space before and during entry



#### Detective Net - C01360

wireless module adds wireless peer-to-peer networking capability



#### Sensor Baffle plate - C01325

Provides additional protection for sensor apertures in extreme conditions, for example by reducing splash back and sand ingress.



#### Detective Plus Water Trap - C011033

Use to help reduce particulate and water ingress when sampling via a tube.





# Sensor option overview

# Sensor Compatibility Overview

	Flam	H2S	CO	O2	SO2	NH3	CO2	Cl2	NO2	NO	O3	CO-H2S	ClO2	H2	HF	F2	PH3	HCN	HCL	COCL2	C2H4O	IR CO2	PID	
Clip SGD		X	X	X																				
Gasman	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X		
T4	X	X	X	X																				
T3	X	X	X	X	X	X	X				X	X											X	
Gas Pro	X	X	X	X	X	X	X	X	X	X	X	X	X											
Gas pro IR	X	X	X	X	X	X	X	X	X	X	X	X	X										X	
Gas pro PID	X	X	X	X	X	X	X	X	X	X	X	X	X											X
Gas Pro TK		X	X	X								X											X	
Detective	X	X	X	X	X	X	X	X	X				X	X	X		X	X				X	X	

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