



Detective Transportable Multi-Gas Monitor



Detective is a transportable multi-gas monitor designed to protect all personnel working within a hazardous area. Units can be used singly or linked together to give area or fence protection. Extremely loud and clear alarms can be easily seen and heard, even at a distance. The high intensity LED clusters and panel warning lights pinpoint the hazard by flashing rapidly. Linked Detectives also go into alarm mode, but until they detect the hazard locally, they flash more slowly. This allows workers to exit the area by the safest route. The alarm tones of Detective can be customised to suit every situation and an audiovisual confidence blip indicates safe working.

The unique tubular steel tripod design ensures that the detectors are effectively shielded from impact and water even when overturned. This makes Detective suitable for use in the harshest field conditions. A large text display gives clear unambiguous information and as four gases can be shown simultaneously, multiple hazards are easily tracked.

Features

Superb pedigree:

- Detective is based on the highly successful Triple Plus multi-gas monitor which has sold over 40,000 units worldwide.

Extremely loud, clear and programmable alarms:

- Wailing omni-directional siren, 101 dBA @ 1 m
- High intensity LED clusters and panel indicator pinpoint source of hazard
- Linked Detectives flash in alarm
- Audible and visible confidence blip.

Uniquely rugged, tripod construction:

- Detectors are fully protected, even if device is overturned
- Raised detectors prevent water ingress
- Easy to set up
- Light, stackable design for easy transportation.

Large four gas, simultaneous text display:

- Clear information, easily seen at a distance
- Easy tracking of multiple hazards.

Wide range of intelligent, interchangeable sensors available:

- Field customisation is quick and simple
- Most sensor combinations are possible, allowing all common hazards to be detected.

Specification

Weight:	8.5 kg (19 lb)	
Dimensions:	660 h x 380 w x 380 d mm (26 x 15 x 15 inches)	
Typical measuring ranges and alarm settings: (up to 4 gas measurement channels)		
	<i>range</i>	<i>alarm</i>
Flammable gas	0-100% LEL	20% LEL
Oxygen	0-25%	19% & 23%
Hydrogen sulphide	0-50 ppm	10 ppm
Carbon monoxide	0-500 ppm	50 ppm
Sulphur dioxide	0-10 ppm	2 ppm
Chlorine	0-5 ppm	0.5 ppm
Nitrogen dioxide	0-10 ppm	2 ppm
Ammonia	0-50 ppm	25 ppm
Hydrogen cyanide	0-25 ppm	10 ppm
Hydrogen chloride	0-10 ppm	5 ppm
Ozone	0-1 ppm	0.5 ppm
Phosphine	0-5 ppm	0.5 ppm
Other sensors available		
Typical response times:	Methane 20 s, Oxygen 10 s, Typical toxic gas 20 s	
Expected sensor life:	Flammable 5 years, Toxic 3 years, Oxygen 1 year minimum	
Audible alarms:	Wailing, omni-directional siren, 101 dBA @ 1 m, user selectable tones Confidence blip (selectable) Continuous tone for low battery	
Visible alarms:	Four large, top-mounted red LED clusters and single red LED on control panel In alarm mode LED clusters flash two at a time in quick succession and red LED lights on those Detectives sensing the hazard LED clusters of linked Detectives flash more slowly Slow flashing green LED indicates normal working Rapid flashing green LED indicates low battery	
Display:	2 lines of 24 characters, dot matrix high contrast LCD with back light operating for 30 minutes Values and units for up to 4 gases displayed simultaneously at current, TWA or peak levels. Low battery, real time and elapsed time, calibration and configuration data also displayed	
Datalogging:	Adjustable sample rate, 100 hours @ 1 minute sample rate (maximum 6000 data points per channel)	
Battery:	6 V, 4.8 Ah Sealed lead acid battery pack	
Battery life:	Standard instrument: 24 hours minimum, depending on sensors	
Battery charging:	Built-in battery charging circuit, dual rate Input 100-250 V ac (Safe Area operation only) Typical charge time 5-6 hours	
Aspirator:	Manual bulb and 2 m hose, both non-absorbent and hydrocarbon resistant 1 m probe, water trap and extra hose available	
Operating temp. range:	-20°C to +50°C (-4°F to 122°F)	
Humidity:	0-95% RH non condensing	
Approval codes:	<i>Europe</i>	Ex ias IIC T4
	<i>USA and Canada</i>	Class 1 Division 1, Groups A,B,C,D
Standards:	<i>Europe</i>	EN50014, EN50020, SFA3009
	<i>USA and Canada</i>	CSA 22.2
Ingress protection:	IP65	
RF radiation:	Tested to EN55022 class B and meets EN50081-2	
RF immunity:	Tested to IEC801-3 and meets EN50082-2	

PC interface

Detective has an in-built PC interface which, using the RS232 lead, can be connected to the serial port of a computer. This must be done in a Safe Area only. Dedicated CrowComms software allows the alarm levels, clock and password to be altered and the datalogging files accessed for spreadsheet analysis.

Autocalibrator

Detective can be routinely calibrated quickly and simply using Autocalibrator. The internal pump of Autocalibrator handles up to five gases. A PC interface provides easy access with optional datalogging for proof of calibration.

Accessories

- Baffle plate (to protect sensors)
- Aspirator
- Interconnecting lead, 10 m
- Computer lead - RS232 serial link
- CrowComms software

Contact

Crowcon Detection
Instruments Limited
2 Blacklands Way
Abingdon Business Park
ABINGDON
Oxfordshire OX14 1DY
UK

Tel: 44 (0)1235 553057
Fax: 44 (0)1235 553062
e-mail: sales@crowcon.com
website: www.crowcon.com