# Eikon™ - Single gas recyclable personal monitor



Tough and rugged Eikon™ is the durable single gas fixed life personal monitor that really lasts the course.

#### **Features**

**Loud & Clear Alarms** 

Easy & Safe to Use

- Four multi- angled LEDs give maximum visability

- Highly audible alarm, 94dBA at 30 cm

- Cannot be turned off accidentally

- End of life indication

Lightweight & Rugged

- Water and dust protected to IP65 and high chemical resistance

- Dust filters are easily replaceable on site

**Technical Specifications** 

Measuring ranges and alarm settings <u>Alarm</u> Range Hydrogen sulphide 0-50ppm 5ppm Carbon Monoxide 0-500ppm 30ppm Oxygen 0-25%w 19.5%w

Typical alarm response time: 5 seconds **Unit life** : 2 years

Audible alarm : 94dBa at 30cm (85dBA at 1m) Visible alarm : 4 multi-angled red LEDs

Display : None

On indication : Green LED flashes every fifteen seconds

Ingress protection : IP65

Ref. No: CR06 B001 Model : Eikon

**Applications** 

Hydrogen Sulphide Offshore Oil & Gas

Petroleum refining and processing

Gas Terminals **Carbon Monoxide** 

Steel processing & manufacture

Shipping (turbines)

Oxygen Marine

Gasman II is the single gas monitor that you can rely on. It is light and comfortable to wear but

Laboratories using liquid Nitrogen

<u>Alarm</u>

5ppm

2ppm

2ppm

0.5ppm

25ppm

10ppm

100ppm

19% & 23%

0-.5ppm

30ppm

20% I FI

Breweries/Soft Drinks

**HVAC** Refrigeration

**Range** 

0-100% LEL

0-500ppm

0-10ppm

0-10ppm

0-50ppm

0-25ppm

0-25%

0-999ppm

0-5ppm

0-5ppm

0-50, 0-100, 0-250ppm

### Gasman II- Personal Monitors for oxygen, toxic and flammable gas

Methane

Chlorine

Phosphine

Ammonia

Oxygen

Hydrogen Sulphide

Carbon Monoxide

Sulphur Dioxide

Nitrogen Dioxide

Hydrogen Cyanide

**Technical Specifications** 



Ref. No: CR06 B002 Model : Gasman II

Up to levels of alarm are available for each unit. Further toxic gas ranges available.

tough enough to withstand the harshest conditions.

Typical Measuring ranges and alarm settings

Typical response times T90

Hydrogen (non-flammable level)

Methane 20 seconds Oxygen 10 seconds Typical Toxic Gas 20 seconds Flammable 5 years

**Expected sensor life** Toxic 3 years

> Oxygen 1 year minimum

Audible alarms : 85 dBA at 1m

Visible alarms : Ultra bright flashing red LED pair

**Datalogging** : Adjustable sample rate,

30-3000 hours @ 1 minute Sample rate (depending on gas concentration)

Ingress protection : IP66



# Gas Detector

# Gasman - Personal Monitors for oxygen, toxic and flammable gas



Ref. No : CR06 B008 Model : Spygas Gasman is small, light, and simple to use providing comprehensive warning of hazardous gas conditions.

#### **Features**

#### Simple:

- True one button operation
- Easy to read LCD display with backlight
- Clear indication of operation status
- 30 days advance calibration due warning

# Assurance:

- 95dBA audible alarm
- Striking twin red/blue visual alarm
- Internal vibration alarm
- 2 levels of instantaneous alarm
- Time weighted average alarms for toxic versions

#### Robust:

- Tough polycarbonate housing
- Full elastomeric overmoulding
- High impact resistance
- IP65 and IP67 compliant

#### Flexible:

- Fully interchangeable i-module sensors
- Flammable toxic and oxygen sensors available
- Rechargeable version for all gas types
- Dry cell versions for toxics and oxygen
- Data and event logging

#### **Technical Specifications**

Available gases and ranges	Range	Alarm UK and ROW	Alarm US
Flammable	0-100% LEL	10% LEL	10%LEL
Oxygen	0-25%	19/23.5%	19.5/23.5%
Hydrogen Sulphide	0-50ppm	10ppm	10ppm
Carbon Monoxide	0-500ppm	35ppm	35ppm
Sulphur Dioxide	0-10ppm	2ppm	2ppm
Chlorine	0-5ppm	0.5ppm	0.5ppm
Nitrogen Dioxide	0-10ppm	3ppm	3ppm
Ammonia	0-50ppm	25ppm	25ppm
Ozone	0-1ppm	0.1ppm	0.1ppm
Hydrogen	0-1000ppm	N/A	N/A
Hydrogen Cyanide	0-25ppm	5ppm	5ppm
Hydrogen Chloride	0-10ppm	1ppm	1ppm
Hydrogen Fluoride	0-10ppm	1ppm	1ppm
Phosphine	0-2ppm	0.2ppm	0.2ppm
Ethylene Oxide	0-10ppm	5ppm	5ppm

Other ranges and alarm levels are available on request.

**Dimensions**: 90x48x24mm HxWxD

Typical response times : Flammable 20s, Toxic gas 20s, Oxygen 10s

PC Interface : RS232

900 hours storage at 1 minute interval.

5000+ capacity event logging.

Sampling : Optional manual aspirator

# Tetra- Personal Multigas Monitors for oxygen, toxic and flammable gas



Ref. No: CR06 B003 Model: Tetra

Single button operation and intelligent sensor modules guarantee simplicity and flexibility of use. The shockproof internal construction and self checking software assure reliable gas detection in the most arduous of environments.

#### **Technical Specifications**

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<u>Gas</u>	<u>Range</u>	Alarm UK and ROW	Alarm US
Flammable	0-100%LEL	20%LEL	10%LEL
Oxygen	0-25%	19/23.5%	19.5/23.5%
Hydrogen Sulphide	0-50ppm	5ppm	10ppm
Carbon Monoxide	0-500ppm	30ppm	35ppm
Sulphur Dioxide	0-10ppm	2ppm	2ppm
Chlorine	0-5ppm	0.5ppm	0.5ppm
Nitrogen Dioxide	0-10ppm	3ppm	3ppm
Nitric Oxide	0-100ppm	25ppm	25ppm
Ammonia	0-50ppm	25ppm	25ppm
Ozone	0-1ppm	0.1ppm	0.1ppm
Hydrogen	0-1000ppm	N/A	N/A
Hydrogen Cyanide	0-25ppm	5ppm	5ppm
Hydrogen Chloride	0-10ppm	1ppm	1ppm
Hydrogen Fluoride	0-10ppm	1ppm	1ppm
Phosphine	0-2ppm	0.2ppm	0.2ppm
Ethylene Oxide	0-10ppm	5ppm	5ppm

Other ranges and alarm levels are available on request. Each gas channel can have two instantaneous alarm levels set. Toxic channels also have Time Weighted Average alarms.

Typical response times : Flammable 20 s, Toxic gas 20 s, Oxygen 10s

Audible Alarms : 90dBA @ 30cm (1ft)

Visible Alarms, Vibrating alarm

Display : Simultaneous display for all gas channels
Display Mode : Continuous real time. Peak readings and TWA

Datalogging : Event logging

Sampling : Hand aspirator or internal electric sampling pump

Ingress Protection : IP65

PC Interface : IR link for RS232 connection

**Autocalibrator**: Tetra can be routinely calibrated using Autocalibrator II

### Triple Plus + IR - Portable Multigas Monitors for flammable hydrocarbons, oxygen and toxic gases



#### **Features**

Infrared hydrocarbon sensor benefits

- Volume % measurement for purging applications% LEL measurement in the air or inert background
- No sensor burnout at high concentration
- Fail safe
- Long sensor lifetime reduced cost of maintenance

Ref. No: CR06 B004 Model: Triple Plus+IR

#### **Technical Specifications**

Ranges and alarms

: Up to three levels of alarm are available per channels. Flammable Gas can be supplied as a single range 0-100% LEL or as a dual range 0-100% LEL/0-100% volume which then occupies two channels. Triple Plus + IR can have up to four channels.

	Range	Alarm	
Oxygen	0-25%	19%/23.5%	
Hydrogen sulphide	0-50ppm	5ppm	
Carbon Monoxide	0-500ppm	30ppm	
Sulphur dioxide	0-10ppm	2ppm	
Chlorine	0-5ppm	0.5ppm	
Ammonia	0-50ppm	25ppm	
Flammable Gas	0-100%	20% LEL	
Flammable Gas	0-100% volume	No alarm	

Flammable Gas calibrations are available for methane, propane, butane or ethylene.

**Typical response times** : Methane 30 s, Oxygen 10 s, Typical Toxic Gas 20 s **Expected sensor life** : Flammable 5 years, Toxic 3 years, Oxygen 2 years

Audible alarms, Visible alarms

**Display**: Values and units for up to 4 gases displayed simultaneously at current, TWA pr peak levels.

Datalogging : Adjustable sample rate, 100 hours @ 1 minute sample rate (maximum 6000 data points per channel),

logging of events, user and site.

Electric pump : Optional internal pump with on/off button

Ingress protection : IP65

PC Interface : RS232 serial

# **Detective - Transportable Multi-gas monitor**



Is the solution to all your temporary area and fence protection needs. Used singly or linked together, Detective gives a loud and clear alarm providing effective warning of gas hazards on an area basis. The rugged water and impact resistant design and clear information display make Detective the ideal choice for your transportable gas detection needs.

# **Technical Specifications**

Typical Measuring ranges and alarm settings	Standard Range	Typical Alarm Levels
(up to four gas measurement channels)		
Flammable gas	0-100% LEL	20% LEL
Oxygen	0-25%	19% & 23%
Hydrogen Sulphide	0-50ppm	10ppm
Carbon Monoxide	0-500ppm	35ppm
Sulphur Dioxide	0-10ppm	2ppm
Chlorine	0-5ppm	0.5ppm
Nitrogen Dioxide	0-10ppm	2ppm
Phosphine	0-5ppm	0.5ppm
Ammonia	0-50ppm	25ppm
Hydrogen (Non-flammable level)	0-2000ppm	- ' '
Hydrogen Cyanide	0-25ppm	10ppm
Hydrogen Chloride	0-10ppm	5ppm
Ozone	0-1ppm	0.5ppm

# GAS ANALYSIS / DETECTION

# Gas Detector



**Linked Detective** 

Ref. No: CR06 B005 Model: Detective Typical response times : Methane 20 s, Oxygen 10 s, Typical Toxic Gas 20 s

**Expected sensor life**: Flammable 5 years, Toxic 3 years, Oxygen 2 years minimum.

Audible alarms, Visible alarms

Display : Values and units for up to 4 gases displayed simultaneously at

current, TWA or peak levels.

Datalogging : Adjustable sample rate, 100 hours @ 1 minute sample rate

(maximum 6000 data points per channel)

Ingress protection : IP65
PC Interface : RS232

Autocalibrator : Detective can be routinely calibrated quickly and simply using

Autocalibrator.

### Spygas - Flammable Gas Leak Detector



Ref. No : CR06 B006 Model : Spygas

**Technical Specifications** 

Sensor : Semi-conductor gas sensor - 5 years life span

**Detection range** : 50 - 10 000ppm+ for methane

Display : LCD with nominal 100, 1000 and 10 000 ppm indicators

Back-light : Automatically back-light on when ambient light levels are low

Audio signal : Increasing in pitch and intensity proportional to gas concentration

Response time : Less than 5 seconds

Zeroing : Automatic, microprocessor controlled

**Detectable gases**: Natural gas, methane, ethane, propane, butane, LPG

# Spygas CO - Carbon Monoxide Gas Leak Detector



Ref. No: CR06 B007 Model: Spygas CO The Spygas CO is designed to provide easy access for hard to reach areas and around pipe work. Usage:

- CO emissions from boilers
- CO emissions from hot air furnaces
- Combustions checks on fires, grills and hobs
- Ambient CO room levels

#### Features

- Ambient background CO levels over a 15 minute period
- Highest recorded value flashes at end of test (complies with BS7967)
- One touch button operation
- Splash proof

### **Technical Specifications**

Sensor Type : Carbon Monoxide

Maximum Range : 10,000ppm (Display 0-999ppm)

**Resolution**: 1ppm (up to 999ppm) Above 999ppm, display reverts to "Hi"

Filter Type : Cross filtered electrochemical
Stabilisation Time : 20 seconds from power on
Response Time : Less than 5 seconds
Audible Alarm : Crescendo up to maximum

# Sprint 2000xt - Portable Combustion Analyser



Ref. No: CR06 C001 Model: Sprint 2000

Five Functions in one compact easy to use meter.

- Combustion Analyser
- Differential Manometer
- Differential Thermometer
- CO Build Up Detector
- Gas Leak Detector

#### **Features**

- Splash Proof
- Back Lit Display
- High Quality Stainless Steel Probe
- Audible Alarm with Crescendo Warning

#### Measures

- Selectable Fuel Types
- Gross or Net Efficiency Selection
- CO Room Test with 30 One Minute Readings & logging of Highest Reading
- Optional Hydrocarbon Leak Detector

#### **Pressure**

- Positive & Negative Pressure with Differential Measurement

#### **Temperature**

- Differential Temperature Measurement with Two Thermocouples
- Outlet, Net and Inlet Temperature Displays
- Logging of 50 Flue Gas Analysis Reports
- Logging of 25 CO Room Test Reports
- Data Output to printer or PC

#### **Technical Specifications**

Fuels : Natural gas, LPG, light oil, heavy oil + other (specified)

**Standard efficiency probe**: Pistol grip; 250mm(10") probe length;2500mm(10") hose length

K-type thermocouple (800°C): Accuracy +/- 0.3%;

Gases	Range	Resolution	Accuracy
Oxygen	0-25%	0.1%	+/-0.3%
Carbon Monoxide	0-10,000ppm	+/-1ppm	<100ppm;+/-5pm
Carbon Monoxide (calculated)	0-25%		>100ppm;+/-5%
CO/CO <sub>2</sub> ratio	0-0.9999		
Combustion efficiency	0-100%		
Gas leak sensor (option)	20-10,000ppm		

#### Draught/pressure measurement

Scales : mbar, inWG, mmWG, PSI

Range : +/- 100mbar
Resolution : 0.01mbar
Accuracy : +/-0.5% fsd

Timer : Timer count up from zero for gas soundness/tightness test, specific report

generation in accordance to IGE/UP/1B

### Flue Gas Analyser



Ref. No CR06 C002 CR06 C003

Model Tempest 50 Tempest 100 Tempest 50 is the fast and economical way to measure the composition of boiler flue emissions. Tempest 100 is one of the most powerful portable combustion analysers capable of multi gas emission analysis, differential pressure and temperature measurement.

#### **Features**

**Pressure** 

- Selectable Fuel Types
- Gross or Net Efficiency Selection

**Temperature** - Differential T

- Differential Thermocouple with Two Thermocouples
- Outlet, Net and Inlet Temperature Displays
- Splash Proof
- Back Lit Display
- High Quality Stainless Steel Probe
- Positive & Negative Pressure with Differential Measurement
- Logging of 75/Tempest100, 100/Tempest 50 Flue Gas Analysis Reports
- Built in Printer
- RS232 and Parallel Data Ports

# **GAS ANALYSIS / DETECTION**

# Flue Gas / Combustion Analyser

# **Technical Specifications**

Fuels : Natural gas, light oil, heavy oil, propane, butane, coal, coke
Probes : Pistol grip; 300mm/Tempest 100, 250mm/Tempest 50
Stainless steel probe length;2500mm hose length

K-type thermocouple (800°C): Accuracy +/-0.3%;

Options : High Temperature to 1100°C, 1m insertion length

Gases	Range	Resolution	Accuracy
Oxygen	0-25%	0.1%	+/-0.3%
Carbon Monoxide	0-10,000ppm	+/-1pm	<100ppm;+/-5ppm, >100ppm;+/-5%
Nitric Oxide (Tempest 100)	0-1,000ppm	+/-1ppm	<100ppm;+/-5ppm, >100ppm;+/-5%
Carbon Dioxide (calculated)	0-25%		
CO/CO <sub>2</sub> ratio	0-0.9999		
Combustion efficiency	0.100%		
Gas leak sensor (option)	20-10,000ppm		
Option with NO sensor	0-1,000ppm		
Optional Sensors (Tempest 100)			
Nitrogen Dioxide	0-200ppm	+/- 1ppm	<20ppm;+/-2ppm, >20ppm;+/-5%
Sulphur Dioxide	0-2,000ppm	+/- 1ppm	<100ppm;+/-5ppm, >100ppm;+/-5%
Hydrogen Sulphide	0-200ppm	+/- 1ppm	<40ppm;+/-2ppm, >40ppm;+/-5%
Hydrogen Chloride	0-50ppm	+/- 1ppm	<40ppm;+/-5ppm, >40ppm;+/-5%
High Capacity Carbon Monoxide	0-10,000ppm	+/- 1ppm	<100ppm;+/-5ppm, >100ppm;+/-5%
(in lieu of standard)			

# Draught/pressure measurement

Range : ±150mbar Resolution : 0.01mbar

Accuracy : ± 0.5% fsd measured at 50mbar

#### Gas-Tec



Ref. No: CR06 C004 Model: Gas-Tec A well proven portable FID (flame Ionisation leak detector). Highly sensitive to hydrocarbon gases at low levels

Gases: Total hydrocarbons

#### **Features**

- Dual range
- High stability
- Visual and audio signal
- Cost effective in operation
- Range 1 10,000 ppm
- Range extender up to 100,000 ppm
- Trigger survey kit (optional)
- Quick response (less than 2 seconds) and recovery time
- Reliable
- Extendable probe

EE-Components Tel: 607-358 4035 Fax: 607-358 4691 Email: sales@ee-components.com

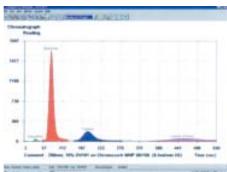
# Flue Gas / Combustion Analyser

# **Autofim II/GC**

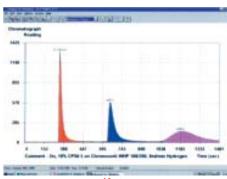


Ref. No CR06 C005 CR06 C006

Model
Autofim II
Autofim II GC







Ketones

Intrinsically safe (EEx ib IIC T4, EEX d IIC TA) Flame Ionisation Detector, for the fast detection of Volatile Organic Compounds in ambient conditions.

#### Gases:

Volatile Organic Compounds Natural gas

#### **Features**

- Proven industrial history
- Portable
- Extendable probe
- Fast response time less than 3 seconds
- Range 0.1 10,000 ppm
- Extended range up to 50,000 ppm (optional)
- Audible signal increasing in pitch with increasing concentration
- Acoustic earphones (IS requirements) for noisy environments
- Portable gas chromatography (optional)

# **Viper**



Ref. No: CR06 C007 Model: Viper

Intrinsically Safe (EEX ia IIC T4) Photo Ionisation Detector

# Gases:

Volatile Organic Compounds Ammonia Hydrogen Sulphide

### **Features**

- ppb, ppm, mg/m3 measurement
- 10 ppb to 1000 ppm range
- Pre-programmed response factors for up to 250 gases
- Fast response time, less than 1 second
- Alarm levels set by user
- Health & Safety mode preset TWA, STEL alarms from EH40 (set by Health & Safety Executive)
- Active calculation of STEL & TWA levels
- Choice of 3 ultraviolet lamps semi selective, better resolution, expands detection limits