



**Unique cartridge technology that enables the Impact range of portable multi-gas detection the flexibility to monitor a range of gases simultaneously**

# Impact Sensor Cartridge



## Convenient to Use

- Self contained package
- Pre-calibrated, ready to go
- No need to return instruments to central location
- Can be replaced in the field

## Easy to Install

- Full instructions included with every cartridge
- Single captive screw fitting mechanism
- Asymmetrical design ensures cartridge can only be fitted one way
- Minimal training required

## Planned Maintenance Made Easy

- Countdown to replacement or calibration included as standard
- Minimizes unexpected failures
- Maximizes availability to the user
- Provides predictive cost of ownership

## Proven Sensor Technology

- High specification sensors
- Stable and accurate
- Poison resistant catalytic bead for flammable
- Electrochemical and patented Surecell™ technology for toxic
- Over 30 years manufacturing experience

## Supplied Fully Configured

- Gas specific data held on smart cartridge
- 3 levels of instantaneous alarm and time weighted average alarms on toxic
- Pre-set limits adjustable via Impact instrument and PC if required

## Serviceable Cartridge Option

- Individual sensor replacement possible
- Traditional service options apply
- Only required for exotic gases

**Honeywell Analytics unique cartridge technology enables the Impact range of portable multi-gas monitors to monitor and display up to four gases simultaneously. The pre-calibrated cartridges use high specification flammable, oxygen and toxic sensors to ensure safe, accurate and reliable measurements are always made.**

Honeywell Analytics leads the market with over 30 years experience in making flammable, oxygen and toxic sensors. In excess of two hundred thousand flammable sensors and one million electrochemical sensors are manufactured every year. With the World's first fully automated production line, quality and repeatability is assured, enabling exacting regulatory needs to always be met.

The proven quality of sensors is at the heart of any gas monitor and is paramount for the protection of lives in hazardous working conditions. Using Honeywell Analytics patented Surecell™ electrochemical technology or poison resistant catalytic bead for your gas detection needs demonstrates a commitment to using the best available technology on the market to keep you and your team safe.

The Impact Sensor Cartridge is available in two configurations, disposable and serviceable. All cartridges are supplied with an oxygen and flammable sensor and up to two toxic sensors can also be fitted. The smart cartridge includes all alarm settings and calibration data enabling cartridges to be easily fitted and swapped between instruments, subject to operational requirements.

Each pre-calibrated cartridge is supplied in a sealed container with calibration certificate and fitting instructions. Replacement of an existing cartridge can be done in less than one minute, so simplifying maintenance and minimising cost. The Impact Sensor Cartridge arrangement and unique Enforcer calibration accessory provides the lowest cost of ownership on the market.



# General Specification



## General Specification

Use	For use with Impact and Impact Pro portable multi-gas monitor for the protection of personnel from up to four hazardous gases in the working environment.			
Techniques used	Flammable - Catalytic bead/ pellistor Toxic/ oxygen - Electrochemical			
Gas	Code	Range	Disposable	Serviceable *
Oxygen	O	0-25%v/v	Always fitted	Always fitted
Flammable	F	0-100%LEL	Always fitted	Always fitted
Carbon Monoxide	C	0-500ppm	O	O#
Hydrogen Sulphide	H	0-50ppm	O	O#
Sulphur Dioxide	S	0-20ppm		O
Chlorine	L	0-10ppm		O
Nitrogen Dioxide	N	0-20ppm		O
Ammonia	A	0-100ppm		O
Carbon Dioxide	D	0-3%v/v		O
	* Serviceable cartridges only available in 3 or 4 channel configurations. # All OFCH, OFC, OFH and OF are disposable only. C or H sensors only available for use in 4 gas Serviceable cartridges.			
Alarm levels	All cartridges supplied calibrated and pre-configured with 3 instantaneous alarm levels per channel and time weighted average alarms on toxic channels. Pre-set limits adjustable via PC if required			
Construction	Easy fit single captive screw with asymmetric design to prevent incorrect fitting by user. RFI shielded polypropylene caseworks for increased reliability and performance.			
Operating temperature	-20°C to +55°C (-4°F to +131°F). Carbon Dioxide: 0°C to +40°C (32°F to +104°F).			
Storage temperature	-10°C to +30°C (14°F to +86°F). Carbon Dioxide: 0°C to +30°C (32°F to +86°F).			
Humidity range	Continuous 20 to 90%RH. Intermittent 0-99%RH non-condensing.			
Approvals	Europe: Ex II 2G, EEx ia d IIC T4 (ATEX). USA: Class 1, Div 1, Groups A, B, C, D (UL). Canada: Class 1, Div 1, Groups A, B, C, D (CSA). Australia (surface): Ex ia s Zone 0, I/IB, T4. Australia (mines): MDA GD 5053. DMT: DMT 02 ATEX G 001 PFG Nr. 41300502. Brazil: BR-Ex ia d IIC T4 (INMETRO).			
Only applicable when used with Impact (Pro) instrument				
Standard supply	Each cartridge is supplied in sealed container complete with installation instructions, calibration certificate and spare pump seal			

## Ordering information

Key	
<b>Code</b>	<b>Gas Name</b>
O	Oxygen
F	Flammable
C	Carbon Monoxide
H	Hydrogen Sulphide
A	Ammonia
D	Carbon Dioxide
N	Nitrogen Dioxide
S	Sulphur Dioxide
L	Chlorine

		TYPE	
		(D)isposable	(S)erviceable
CHANNELS	2	XX	Not Available
	3	CX XH	AX DX NX SX XL
	4	CH	See Table

4 CHANNEL SERVICEABLE OPTIONS						
	A	C	H	N	S	L
A	✗	✗	✗	✓	✓	✓
C	✓	✗	✗	✓	✓	✓
D	✓	✓	✓	✓	✓	✓
H	✓	✗	✗	✓	✗	✓
NS	✓	✗	✗	✗	✗	✓
A	✗	✗	✓	✗	✗	✗
S						

e.g. 2302BC S 4 OF AS E  
= 2302BCS40FASE

ALARM SETTINGS		
E	UK	EH40
O	USA	OSHA*
F	France	
G	Germany	
I	Italy	
S	Spain	
D	Netherlands	
* Default		

Impact and Impact Pro instruments must be ordered separately.

## Optional accessories

Cartridges can be re-programmed and re-calibrated via the Impact and Impact Pro instrument and optional base station and PC based Impact Configuration Utility.



# Our Product Range



## Fixed Gas Monitoring

Honeywell Analytics offers a wide range of fixed gas detection solutions for a diverse array of industries and applications including: Commercial properties, industrial applications, semiconductor manufacturers, energy plants and petrochemical sites.

- » Detection of flammable, oxygen and toxic gases (including exotics)
- » Innovative use of 4 core sensing technologies – paper tape, electrochemical cell, catalytic bead and infrared
- » Capability to detect down to Parts Per Billion (ppb) or Percent by Volume (%v/v)
- » Cost effective regulatory compliance solutions

## Portable Gas Monitoring

When it comes to personal protection from gas hazards, Honeywell Analytics has a wide range of reliable solutions ideally suited for use in confined or enclosed spaces.

These include:

- » Detection of flammable, oxygen and toxic gases
- » Single gas personal monitors – worn by the individual
- » Multi-gas portable gas monitors – used for confined space entry and regulatory compliance
- » Multi-gas transportable monitors – used for temporary protection of area during site construction and maintenance activities

## Technical Services

At Honeywell Analytics, we believe in the value of great service and customer care. Our key commitment is providing complete and total customer satisfaction. Here are just a few of the services we can offer:

- » Full technical support
- » Expert team on hand to answer questions and queries
- » Fully equipped workshops to ensure quick turnaround on repairs
- » Comprehensive service engineer network
- » Training on product use and maintenance
- » Mobile calibration service
- » Customised programmes of preventative/corrective maintenance
- » Extended warranties on products

### Find out more

[www.honeywellanalytics.com](http://www.honeywellanalytics.com)

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