



**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

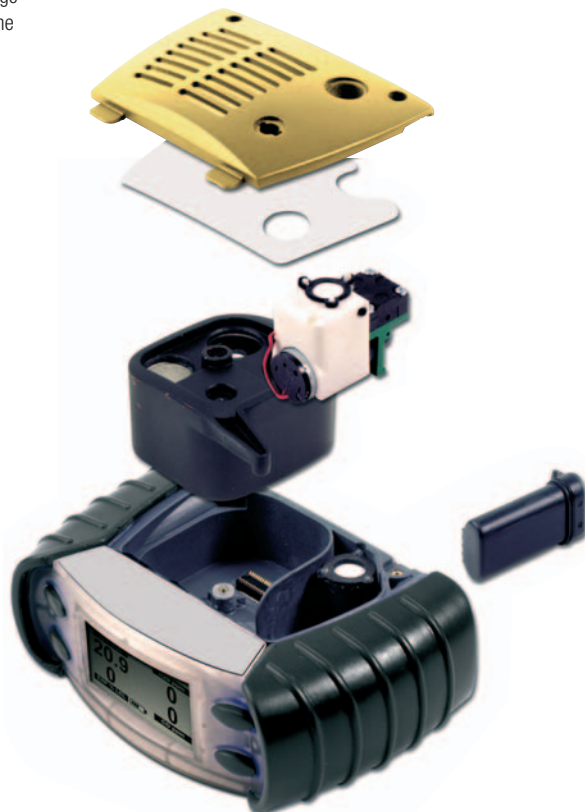
**Honeywell Analytics unique cartridge technology enables the Impact range of portable multi-gas monitors to monitor and display up to four gases simultaneously. The pre-calibrated cartridges use high specification flammable, oxygen and toxic sensors to ensure safe, accurate and reliable measurements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

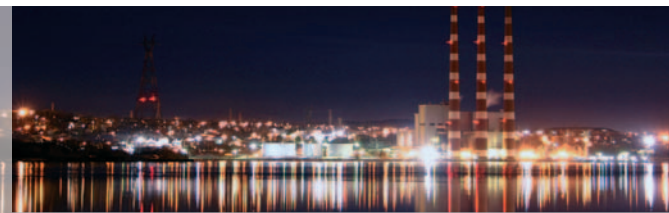
The proven quality of sensors is at the heart of any gas monitor and is paramount for the protection of lives in hazardous working conditions. Using Honeywell Analytics patented Surecell™ electrochemical technology or poison resistant catalytic bead for your gas detection needs demonstrates a commitment 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 minimizing 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	0	0#
Hydrogen Sulfide	H	0-50ppm	0	0#
Sulfur Dioxide	S	0-20ppm		0
Chlorine	L	0-10ppm		0
Nitrogen Dioxide	N	0-20ppm		0
Ammonia	A	0-100ppm		0
Carbon Dioxide	D	0-3%v/v		0

\* 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.

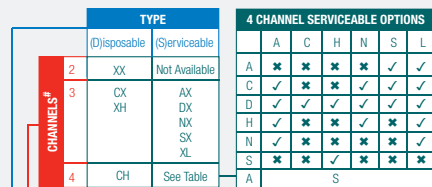
**Approvals** USA: Class 1, Div 1, Groups A, B, C, D (UL).  
Canada: Class 1, Div 1, Groups A, B, C, D (CSA).

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

Code	Gas Name
O	Oxygen
F	Flammable
C	Carbon Monoxide
H	Hydrogen Sulfide
A	Ammonia
D	Carbon Dioxide
N	Nitrogen Dioxide
S	Sulfur Dioxide
L	Chlorine



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.

As World leaders in gas detection solutions, Honeywell Analytics' Lumidor range is best placed to provide the most efficient, practical and cost-effective equipment. Wherever personal protection is required, you can rely on our equipment to provide practical solutions and to help keep your business running safely.

## The Lumidor range of portable gas detection



Micromax Pro



Micromax +



Micromax PID



Minimax XT



Minimax XP



Minimax X4

### Micromax range

With lifetime warranties\*, the Micromax range offers the most robust microprocessor controlled multi-gas monitors available. Providing all the personal gas protection features you require, Micromax monitors can handle the very toughest working conditions.

\*Lifetime warranty excludes sensors, batteries and pump.

### Minimax range

The Minimax range provides personal single and multi-gas protection and operational compliance in industrial environments. They are ideal for people working in areas that are not easily accessible and/or where fixed detection systems are not installed or not practical.



### Impact and Impact Pro

Impact and Impact Pro are ideal for providing personal protection against gases in tough environments, especially in confined spaces where entry and exit may be difficult. The Impact range provides easy and economical means of personal gas detection to meet compliance requirements. The Safelink Entrant/Attendant function ensures safe working practices are followed.

### Find out more

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

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Enforcer

The Enforcer helps you to easily (and cost-effectively) comply with regulations requiring the regular testing of instruments. Because it can calibrate Impact multi-gas monitors within less than two minutes, the instruments are always ready for use. It also reduces cost by avoiding the need for specialist knowledge and equipment, or sub-contracting to expensive third parties, which also adds delays.



Safelink

Safelink adds an extra safety dimension, enabling two-way communication in difficult areas. Easy to use, the system links two Impact Pro multi-gas monitors together, allowing a co-worker in a confined space to be monitored remotely, as well as providing a way of exchanging messages.

# Honeywell