

# Gas-Pro PID

## Personal Gas Detection Equipment





## Gas-Pro PID

## Personal 5 Gas Detector with Optional Pump

When lives and property are at risk and you need gas detection equipment that is totally reliable, you need Crowcon. For over 40 years Crowcon has been developing and manufacturing high quality products with a reputation for reliability and technical innovation.

Crowcon provide both single gas and multigas monitors for personal safety and portable monitoring applications providing protection against a wide range of industrial gas hazards.



### Choosing the portable gas detector for your needs

Designed with industrial environments and fleet managers in mind, Gas-Pro PID offers detection of up to 5 gases in a compact and rugged solution capable of withstanding harsh environments and everyday use. Gas-Pro PID has an easy-to-read top mount display combining ease of use with user focused features. An optional internal pump, activated with the flow plate, takes the pain out of pre-entry testing and allows Gas-Pro PID to be worn either in pumped or diffusion modes.

#### **User friendly**

Top mount display	Makes it easy to read at a glance for quick decision-making	
Simple single button operation	Limited training required	
Ergonomically designed	Sits well when worn and fits easily in the hand	

#### **Flexibility**

Monitors 5 gases from many different options	Hundreds of variants to choose from	
Pumped and diffusion solutions	Offers multiple uses within one compact detector	
Multiple languages	Regionally configurable	
Automatic fail safe flow pump plate recognition	Simple to use and no tools required	
Specific and unique Pre-Entry Check (PEC) mode	Takes away the pain of pre-entry testing	
PID correction factor	Set to target VOC's	

#### Reliability

Broad range PID	Hundreds of gases detected	
Water and dust resistant to IP65 and IP66	Capable of withstanding harsh environments	
Bump and calibration reminders	Full compliance	
Positive/+ve Safety	Full site compliance	
Strong pump	Up to 30m sampling	

## Gas-Pro PID







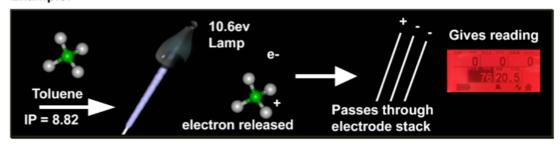
### PID Technology

Volatile Organic Compounds are organic compounds characterised by their tendency to evaporate easily at room temperature. Familiar substances containing VOCs include solvents, paint thinners and glues, as well as the vapours associated with fuels such as gasoline, diesel, heating oil, kerosene and jet fuel. This category also includes many specific toxic substances such as benzene, butadiene, hexane, toluene, xylene, and many others.

Solvents, fuels and many other VOC vapours are extremely common in many workplace environments. Most have surprisingly low occupational exposure limits. For most VOCs, long before you reach a concentration sufficient to register on a combustible gas indicator, you will have easily exceeded the toxic exposure limits for the contaminant.

The amount of energy needed to remove an electron from the target molecule is called the Ionisation Potential (IP). The PID sensor Crowcon use in the Gas-Pro PID is a 10.6ev (Electron Volt) and emits a UV light source. The target gas will pass through the light source and if the gas has an ionisation potential of less than 10.6 an electron will be released from the gas compound. The gas will then pass through the electrode stack that will capture any moisture that is released during this chemical reaction and, more importantly, give a reading. The output will be converted into the PPM readings shown on the screen.

#### Example:



Key markets are Hazmat teams such as fire fighters and quick responders, shipping containers, industrial such as pharmaceutical or plastics production. Aviation is also a key market with wing tank entry requiring a PID sensor. For more information on this technology please contact your local supplier.

#### **Gas-Pro PID Specifications:**

Size	43 x 130 x 84mm (1.7 x 5.1 x 3.3ins)		
Weight	309g 4 gas (10.8oz)/ 340g pumped (11.9oz) 333g 5 gas (11.7oz)/ 362g pumped (12.7oz)		
Alarms	Audible >95dB @ 30cm (98dB @ 30cm in loud mode) Visual - all angle dual red/blue LEDs Vibrating alert		
Display	Top mount for ease of view with dual colour backlight (green/red)		
Data logging	125hrs at 10-second intervals (45,000 logs)		
Event logging	Alarm, over range, calibration, bump, on/off, TWA, 1000 events		
Battery	Rechargeable Li-ion, >14 hours (13 hours pumped operation) based on CH <sub>4</sub> , O <sub>2</sub> , H <sub>2</sub> S, CO Typical charge time 7.5 hours		
Sampling	Internal pump as option		
Operating temperature	-20°C to +55°C (-4°F to +131°F)		
Storage	-25°C to +65°C (-13°F to +149°F)		
Humidity	10 to 95% RH		
Ingress protection	Independently tested to IP65		
Approvals	IECEx: Ex d ia IIC T4 Gb Tamb -20°C to +55°C ATEX: II 2 G Ex d ia IIC T4 Gb Tamb -20°C to +55°C UL: Gas detector use in hazardous locations Class 1, Division 1, Groups A, B, C, and D only as to intrinsic safety INMETRO		
Compliance	FCC and CE Complies with EMC Directive 2004/108/EC EN50270 and ICES-003		
Interface	Data connection for gas test solutions and direct to PC		
Charging	Direct connection to multiregional power supply Vehicle charger adaptor Desktop cradle USB power and communications lead		

#### **Gases and Ranges:**

Gas	Range	Typical Alarms	Resolution
PID	0-1000ppm	50ppm	1ppm
Ammonia (NH <sub>3</sub> )	0-100ppm	25ppm	1ppm
Carbon dioxide (CO <sub>2</sub> )	0-5% vol.	0.5% vol.	0.01% vol.
Carbon monoxide (CO)	0-2000ppm	30ppm	1ppm
Carbon monoxide (CO)	0-500ppm	30ppm	1ppm
Carbon monoxide (hydrogen filtered)	0-2000ppm	30ррт	1ppm
Chlorine (Cl <sub>2</sub> )	0-5ppm	0.5ppm	0.1ppm
Dual toxic (CO-H <sub>2</sub> S)	H <sub>2</sub> S 0-100ppm CO 0-500ppm	5ppm 30ppm	1ppm 1ppm
Flammable	0-100% LEL	20% LEL	1% LEL
Hydrogen sulphide (H <sub>2</sub> S)	0-100ppm	5ppm	1ppm
Nitrogen dioxide (NO <sub>2</sub> )	0-20ppm	1ppm	0.5ppm
Oxygen (O <sub>2</sub> )	0-25% vol.	19%/ 23% vol.	0.1% vol.
Ozone (O <sub>3</sub> )	0-1ppm	0.1ppm	0.01ppm
Sulpher dioxide (SO <sub>2</sub> )	0-20ppm	1ppm	0.1ppm
Chlorine dioxide (CIO <sub>2</sub> )	0-1ppm	0.1ppm	0.1ppm
Nitric oxide (NO)	0-100ppm	25ppm	1ppm



PID-A1 sensor



Cleaning kit



**Gas-Pro PID Accessories:** 



Q-Test



Portables Pro software



Charger cradle



Pumped flow plate



USB communications lead

