

# **Alphasense PID Sensors**

A range of Photoionisation sensors developed for the detection and monitoring of Volatile Organic Compounds in even the harshest of conditions.





# Five PID sensors. One global manufacturer

Photoionisation sensors (PIDs) are the primary technology for the accurate detection of Volatile Organic Compounds (VOCs) in low concentrations.

This new range of Alphasense PIDs has been developed to deliver a rapid response and provides both greater baseline stability and negligible temperature response when compared to other brands. With lower power consumption and longer life expectancy than higher priced products, the Alphasense range represents a significant advancement in PID technology.

#### PID-AY5



- 0 to 20 ppm range
- 1(ppb) minimum detection level
- PN 000-0022-AY5

#### PID-AH5



- 0 to 40 ppm range
- 1(ppb) minimum detection level
- PN 000-0022-AH5

#### PID-AR5



- 0 to 200 ppm range
- 10(ppb) minimum detection level
- PN 000-0022-AR5

#### PID-A15



- 0 to 4,000 ppm range
- 100(ppb) minimum detection level
- PN 000-0022-A15

#### PID-AG5



- 0 to 10,000 ppm range
- 500(ppb) minimum detection level
- PN 000-0022-AG5

### **Key Features**

- 5 different detection ranges to suit your application
- 10,000 hours expected lamplife
- 5-year operating life (excludes consumables)
- 12 months lamp warranty, 2-year warranty on all other parts
- Lamp re-ignition circuit for fast, repeatable
   & dependable start-up
- · Range of accessories including gas hood
- UL, CAN/CSA, ATEX, IECEx certified

### **Key Benefits**

- Rapid response & greater baseline stability
- Lowest power consumption in its class
- Internal, input voltage regulation for greater signal stability
- Negligible temperature response
- Fully Interchangeable with most common manufactured PID sensors
- Temperature and humidity compensated
- Dual filter technology protects from aerosols & particulates
- · Simple servicing and maintenance



### **Applications**

The Alphasense PID range has been designed to offer performance, longevity and affordability across 5 range categories which cater for the full breadth of industry demand. Offered in the industry standard A-Series (also referred to as 4-Series) format, Alphasense PIDs are well suited to both portable and fixed instruments.

Common industry applications include:

- Air Quality Monitoring
- Analytical GC
- Industrial Hygiene
- · Emissions and spills

- Health and Safety
- Breathing Air
- Soil Sampling
- Emergency/hazmat













### **Specifications**

### **Technical Specifications**

Weight	< 8 grams
Package Type	4P cell dimensional profile
Serviceable Parts	Lamp, detector cell, filters (2), cap, spacer
Lamp Life	10,000 hours (typical life)
Onboard Filters	Removes liquids/particles
Warranty Period	24 months for electronics and housing, 12 months for lamp

### **Certifications & Approvals**

USA	UL 913, 8th Edition. Intrinsically Safe Apparatus and Associated Apparatus for use in Class I, II, and III, Division 1, Hazardous (Classified) Locations
Europe	ATEX directives: EN 60079–0:2018, EN 60079–11:2012; (EX) II 1 G Ex ia IIC Ga, –20 oC – 60 oC ATEX certificates: DEMKO 13 ATEX 1304446U Rev. 6; C E 0539
Other	IECEx Standards: 60079-0 Ed. 7; 60079- 11 Ed. 6; Certificate IECEx UL 13.0050U Issue: 6; CAN/CSA C22.2 No.157-92
Patents	US Pat 6,646,444 Japan Pat 3,793,757

### **Operating Specifications**

Temperature Range	-20°C to 60°C (-4°F to 140°F)
Relative Humidity Range	0 to 90% non-condensing
Humidity Response	< 1% of full scale @ 90% relative humidity
Humidity Quenching Effect	< 15% @ 90 relative humidity

### **Electrical Specifications**

Supply Voltage	3.2 V to 5.5 V (input voltage regulator included)
Current	≤ 38 mA @ 22°C ± 2°C
Output Signal	0.045 V to 2.5 V linear



### Contact us

If you would like to enquire about our products or have a project you'd like to discuss with us, please get in touch via our website, by email or by phone. We look forward to working with you soon.

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