



# GAScan™ Series

## PIDScan-800

World's first fixed VOC gas monitor  
With *built-in Self-Cleaning* feature  
Ease of maintenance and Low costs of ownership



### *Special Features:*

- Patented auto-cleaning and auto-zeroing feature to improve operation performance without interruptive maintenance
- Auto-calibration for fast response and uncompromised accuracy
- Built-in temperature and humidity sensors for accurate and real-time compensation
- Built-in alarm LED-ring lights for easy of use and cost efficiency

- 20 mA analog output ranging from 0.1 to 100 ppm, 1 to 1,000 ppm, and 0.01 to 20 ppm isobutylene for ultra-sensitive version
- PID sensor highly resistance to humidity interference
- Explosion proof for hazardous application
- With built-in heavy-duty diaphragm pump to draw in sample gas
- Large numerical and graphical dot-matrix display with backlight sensor
- Magnetic interference for non-intrusive operation
- 3 dry relay contacts – 2 for alarm and 1 for fault

## Ultra Perfection

Riding on the achievements  
from legacy of precision and inner functionality

# GAScan™ Series

## Model PIDScan-800

The PIDScan-800 is permanently mounted volatile organic compound (VOC) monitor, using a Photo-ionization detector (PID) which operates from a 24 Vdc power source, and provides an analogue output of 4-20 mA. There are available in full scale range of 100.0 ppm, 1,000 ppm and 20.00 ppm Isobutylene equivalent, Housed in an explosion-proof enclosure, the PIDScan is equipped with a local digital display of the gas concentration and various functional features, such as built-in self-cleaning, dry relay contacts and alarm ring-LED lights.

### What is this built-in self-cleaning feature?

Under some environmental conditions, a contaminated sensor can interfere with the performance of the PID detector. To enhance the performance under such harsh conditions, the PIDScan-800 device provides a smart processor to operate a multi-way valve, to control and regulate clean air to flow through the detection chamber. The principle of this apparatus is a cyclic application of clean air to neutralize and flush out the pollution and contamination inside the sensor, so that the sensor is always ready for fresh and accurate measurement. The user can select this mode on the device. The instrument signals the cleaning mode with a separate output.

### What is this built-in alarm ring-LED light feature?

The PIDScan-800 series has the option of built-in alarm lights, where a ring of LED lights will up in an alarm condition. Under Alarm 1 condition, the LED ring-lights will flash RED intermittently. Under Alarm 2 condition, they will flash RED permanently. And finally, under Fault mode, the LED ring-lights will flash Yellow permanently; thus showing all the various alarm conditions, yet visible from a distance, without any additional external alarm devices. A sound cost-saving feature, indeed.

## Specification

<b>PID sensor</b>	10.6 eV (krypton); Ceramic electrode discharge lamp		
<b>Configuration</b>	<b>Range</b>	<b>Resolution</b>	<b>Accuracy</b>
	0-20 ppm	0.01 ppm	± 2%
	0-100 ppm	0.1 ppm	± 5%
	0-1,000 ppm	1 ppm	± 2%
<i>All with Temperature and Humidity compensation on board</i>			
<b>Self-cleaning</b>	Built-in self-cleaning		
<b>Relay contacts</b>	3xSPST dry contacts (2 X for alarm; 1 X for fault)		
<b>Ring LEDs Alarm</b>	Built-in ring alarm LEDs; Yellow and Red		
<b>Response Time</b>	T90 < 30sec		
<b>Power</b>	9-36 Vdc, max. 125mA At 24 Vdc		
<b>Cable</b>	3-wire shielded; max. 1 Ohm at 24 Vdc		
<b>Output</b>	4-20mA		
	Modbus RS 485		
	SPST relay contact (x2), Fault relay, max 30 V, 2 A.		
<b>Sampling method</b>	Built-in diaphragm pump (-500 ml/min)		
<b>Display</b>	Graphic LCD 128x64 pixels, with bockit		
<b>User interface</b>	Non-intrusive using magnetic key		
<b>Operating Cond.</b>	Temperature: -20deg(10+60degC [-4degf to 140 degf])		
	Humidity: 0-95%RH (non-condensing)		
<b>Weight</b>	3.5 kg		
<b>Dimension</b>	L 12.4 x D 12.5 x H 25.3 (cm)		
<b>Ex Approval</b>	ATEX II 2G Ex d IIC T6 Gb		
	UL Class I Dir I Group B, C and D		
<b>IP Rating</b>	IP66		
<b>EMI/RFI</b>	Compliance to EMI/RFI Directive 89/336/EEC		



### GDS Instruments Pte Ltd

33 Ubi Avenue 3, Unit #05-28  
Vertex Building Tower B  
Singapore 408868.



[www.gds-instruments.com](http://www.gds-instruments.com)



[sales@gds-instruments.com](mailto:sales@gds-instruments.com)

Distributed By:

**ELMER**  
Elmer Company Limited

Hot Line : 095-629-0524  
[info@elmer.co.th](mailto:info@elmer.co.th) | [www.elmer.co.th](http://www.elmer.co.th)

# Volatile Organic Compound(VOC) Gas List for GDS PIDScan800

Pentanone	Cyclohexylamine	Heptan-3-one	Methylstyren
Acetaldehyde	Cyclopentane	Heptano	Naphthalene
Acetic Anhydride	Cyclopropylamine	Hexamethyldisilazane	n-Heptane
Acetone	Decane	Hexane-2-one	n-Hexane
Acetophenone	Diacetone alcohol	Hexanol	Nickel carbonyl
Acrolein	Dibromoethane	Hexene	Nicotine
Acrylic Acid	Dichloropropene	Hydrazine	Nitroaniline
Allyl alcohol	Dichloropropene	Hydrogen iodide	Nitrobenzene
Ammonia	Dichlorobenzene	Hydrogen sulfide	Nonane
Amyl acetate	Dichloroethene	Indene	Octane
Amyl alcohol	Dicyclopentadiene	Iodine	Octene
Aniline	Diesel Fuel	Iodoform	Pentan-3-one
Anisole	Diesel Fuel (Automotive)	Iodomethane	Pentandione
Arsine	Diethanolamine	Isobutanol	Pentane
Benzaldehyde	Diethylamine	Isobutyl acrylate	PGM
Benzenamine	Diethylaminopropylamine	Isobutylene	PGMEA
Benzene	Diisobutyl ketone	Isooctyl alcohol	Phenol
Benzenethiol	Diisobutylene	Isopar E Solvent	Phenyl epoxypropyl ether
Benzonitrile	Diisopropylamine	Isopar G Solvent	Phenylenediamine
Benzyl alcohol	Diketene	Isopar K Solvent	Phosphine (in air)
Benzyl chloride	Dimethoxymethane	Isopar L Solvent	Picoline
Benzyl format	Dimethyl disulfide	Isopar M Solvent	Pinene - alpha
Biphenyl	Dimethyl sulfoxide	Isophorone	Pinene - beta
Bis(2,3-epoxypropyl) ether	Dimethylacetamide	Isoprene	Piperylene, isomer mix
Bromine	Dimethylamine	Isopropyl chloroformate	Propanol
Bromobenzene	Dimethylaniline	Isopropyl ethanoate	Propene
Bromoethene	Dimethylethylamine	Isopropyl ether	Propionaldehyde
Bromoethyl methyl ether	Dimethylformamide	Kerosene (C10-C16)	Propyl acetate
Bromomethane	Dimethylhydrazine	Ketene	Propyl mercaptan
Bromopropane	Dioxane	Limonene	Propylamine
Butenal	Dioxolane	Methacrylic acid	Propylene glycol
Butadiene	Divinylbenzene	Methanamine	Propyleneimine
Butadiene diepoxide	Epichlorhydrin	Methoxyethanol	Pyridine
Butan	Epoxypropane	Methoxyethoxyethanol	Quinoline
Butan(MEK)	Ethanethiol	Methoxyethyl ether	Styrene
Butanal	Ethanol	Methyl methylprop enoate	tert- Butyl alcohol
Butene	Ethanolamine	Methyl acetate	tert- Butylamine
Butoxyethanol acetate	Ethene	Methyl acrylate	Tetrachloroethene
Butoxyethanol	Ethoxyethane	Methyl amyl ketone	Tetrahydrofuran
Butoxyethoxyethanol	Ethoxyethanol	Methyl ether	Thiophene
Butyl acetate	Ethyl lactate	Methyl isoamyl ketone	Toluene
Butyl hydroperoxide	Ethyl acetate	Methyl isocyanate	Tolylene diisocyanate
Butyl mercaptan-iso	Ethyl acetoacetate	Methyl isothiocyanate	Trans Dichloroethene
Butyl propenoate	Ethyl caprylate	Methyl mercaptan	Tribromomethane
Butylamine	Ethyl chloroformate	Methyl salicylate	Trichlorobenzene
Carbon disulfide	Ethyl hexyl acrylate	Methyl sulfide	Trichloroethene
Chlorine dioxide	Ethyl propenoate	Methyl t-butyl ether	Triethyl borate
Chlorobutadiene	Ethyl sulfide	Methyl butadiene	Triethyl phosphate
Chlorobenzene	Ethylamine	Methyl pentanediamine	Triethylamine
Chloroethyl methyl ether	Ethylbenzene	Methyl butylacetate	Trimethyl borate
Chloropropene	Ethylene glycol	Methyl pyrrolidinone	Trimethyl phosphate
Chlorotoluene	Ethylene glycol dimethyl ether	Methylbutanol	Trimethyl phosphite
Chlorotoluene	Ethylene glycol, Acrylate	Methylbutane	Trimethylamine
Chlorotrifluoroethene	Ethylene glycol, monothio	Methylcyclohexane	Trimethylbenzene
CisDichloroethene	Ethylene oxide	Methylcyclohexanol	Trimethylpentane
Cresol, m-	Ethylenediamine	Methylcyclohexanone	Undecane
Cresol, o-	Formamide	Methylethyl-benzene	Valeraldehyde
Cresol, p-	Furfural	Methylhexanone	Vinyl acetate
Crotonaldehyde	Furfuryl alcohol	Methylhydrazine	Vinyl bromide
Cumene (Isopropylbenzene)	Gasoline	Methylpentanol	Vinyl chloride VCM
Cyclohexane	Gasoline - 92 octane	Methylpentanone	Vinyl cyclohexene
Cyclohexanol	Glutaraldehyde	Methylpentanediol	Xylene
Cyclohexanone	Glycidyl methacrylate	Methylpropanal	
Cyclohexene	Heptan	Methylpropylethanoate	