



PID Gas Detector

A fixed-point Photo-Ionization Detector (PID) transmitter that operates from a 9 to 36 VDC power source and provides an analog signal output (4-20 mA) in three full scale ranges of 20 ppm, 100 ppm, or 1,000 ppm isobutylene equivalent. Housed in an explosion-proof enclosure, the detector has a local digital display of the gas concentration and functional keys for performing calibration.

Key Features

- 4-20 mA analog output ranging from 0.1 to 99.9 ppm, or 1 to 999 ppm isobutylene equivalent
- 4-20 mA analog output ranging from 0.01 to 19.99 ppm isobutylene equivalent for ultra-sensitive version
- Explosion-proof enclosure for hazardous locations
- Long life 10.6 eV Ultraviolet lamp and 3D Sensor
- Built-in pump with patented self-cleaning duty cycle operation and adjustable sample rate
- Local display with adjustment keys
- Magnetic key interface eliminates need to open explosion proof housing when making calibration and other minor adjustments
- Operation from 9 to 36 VDC
- Volt-free contact alarm output (<30V,2A)

Applications

- Waste water treatment plants
- Marine and off-shore oil wells
- Refineries & petrochemical plants
- Power plants
- Pulp and paper mills
- Solvent recovery systems
- Painting and coating operations

Specifications

Size	127mm x 127mm x 115mm (5"L x 5"W x 4.5"H)	Relays	v.f.c. 30V 2A for low and high alarm
Weight	2.5Kg (5.5lb)	Sampling	Internal diaphragm pump
Detector	3D PID sensor with 10.6eV lamp	Approvals	ATEX II 2 G EExd IIB T6 UL Class I, Div. 1, Groups B,C,D cUL Class I, Div. 1, Groups B,C,D
Power	9-36Vdc, 125mA at 24Vdc	Temperature range	-20 to +55°C (-4 to +131°F)
Display	4-Digit LCD with 4 colour coded status LED's	Humidity	0-95% RH (non-condensing)
Keypad S	Magnetic keys for calibration	Mounting	2 holes at 133mm ctrs. 3/4" NPT gland entry
Response time (T90)	40 seconds (isobutylene)	Output	4-20mA (current source)

VOC's Detected by PID (many other gases are also detectable, contact Crowcon for a full list)

Acetaldehyde (Acetic Acid)	Cyclohexene	Ethyl Mercaptan	Methylcyclohexane	Tetramethyl Lead
Acetic Anhydride	Cyclopentadiene	Ethyl Silicate	Methylcyclohexane	Toluene
Acetone	Di-ethylhexyl Phthalate	Ethylamine	Methylcyclohexanol	Toluidine
Acrolein	Diacetone Alcohol	Ethylene Dibromide	Monomethylaniline	Toner Fluid Vapor
Acrylamide	Diazomethane	Ethylenediamine	Morpholine	Trichloroethylene
Acrylonitrile	Dibutylphthalate	Ethyleneimine	Naphthalene	Triethylamine
Allyl Alcohol	Dichlorobenzene	Furfural	Naphthylamine	Turpentine Vapor
Allyl Chloride	Dichloro Ethyl Ether	Furfuryl Alcohol	Nitroaniline	Vinyl Chloride
Allyl Glycidyl Ether	Dichloroethylene	Gasoline	Nitrobenzene	Vinyl Toluene
Allyl Propyl Disulfide	Dichlorvos	Glycidol	Nitrochlorobenzene	White Spirit
Amino Pyridine	Diesel	Heptane	Nitromethane	Xylene
Amyl Acetate	Diethylamino Ethanol	Hexane	Nitrosodimethylamine	
Aniline	Diethylamine	Hexanone	Nitrotoluene	
Anisidine	Diglycidyl Ether	Hexone	Octane	
Benzene	Diisobutyl Ketone	Hexylacetate	Pentaborane	
Benzyl Chloride	Diisopropylamine	Hydroquinone	Pentane	
Bromoform	Dimethylamine	Isoamyl Acetate	Pentanone	
Butadiene	Dimethylaniline	Isobutyl Acetate	Perchloroethylene	
Butoxyethanol	Dimethylformamide	Isobutyl Alcohol	Phenol	
Butyl Acetate	Dimethylhydrazine	Isophorone	Phenyl Ether	
Butyl Alcohol	Dimethyloacetamide	Isopropyl Acetate	Phenylene Diamine	
Butyl Mercaptan	Dimethylphthalate	Isopropyl Alcohol	Phenylhydrazine	
Butylamine	Dinitrotoluene	Isopropyl Ether	Phosphine	
Butyl Glycidyl Ether	Dinitro Cresol	Isopropylamine	Phosphorus	
Butyl Toluene	Dinitro Analine	Isopropyl Glycidyl Ether	Trichloride	
Camphor Vapor	Dinitro Benzene	JP 4,6,8	Phthalic Anhydride	
Carbon Disulfide	Dioxane	Ketene	Propyl Acetate	
Chloroacetaldehyde	Diphenyl	Mesityl Oxide	Propyl Alcohol	
Chloroacetophenone	Dipropylene Glycol Methyl Ether	Methyl Acetate	Propylene Dichloride	
Chlorobenzene	(Epichlorohydrin)	Methyl Acetylene	Propylene Imine	
Chloromethyl Methyl Ether	(Ethanol)	Methyl Acrylate	Propylene Oxide	
Chloronitropropane	Ethanolamine	Methyl Amyl Ketone.	Pyridine	
Chloroprene	Ethoxyethyl Acetate	Methyl Bromide	Quinone	
Chrysene	Ethyl Acetate	Methyl Cellosolve Acetate	Stibine	
Cresol	Ethyl Acrylate	Methyl Ethyl Ketone	Stoddard Solvent	
Crotonaldehyde	Ethyl Amyl Ketone	Methyl Hydrazine	Vapor	
Cumene	Ethyl Benzene	Methyl Iodide	Styrene	
Cyclohexane	Ethyl Bromide	Methyl Mercaptan	Terphenyls	
Cyclohexanol	Ethyl Butyl Ketone	Methyl Methacrylate	Tetrachloroethylene	
Cyclohexanone	Ethyl Ether	Methyl Styrene	Tetrachloronaphthelene	
		Methylamine	Tetrahydrofuran	

Not detected by PID:

Acetonitrile
Carbon Dioxide
Carbon Monoxide
Ethane
Freons
Hydrogen
Hrdrogen Bromide
Hydrogen Chloride
Hydrogen Cyanide
Hydrogen Fluoride
Methane
Nitric Acid
Nitrogen
Oxygen
Ozone
Sulfur Dioxide
Water

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