

► WatchGas XDI-PID

VOC gas detector (volatil organic compounds)



Technical specifications

Sensor: 10,6 eV PID lamp available with 2 ranges 0-1000 ppm (standard) or 0.5 ppb – 50 ppm (optional)

Certifications:

- Explosion proof ATEX-IECEx
- II 2G Ex db IIC T6...T4 Gb
- II 2D Ex IIIC T85°C... T135°C Db

Power supply: 18 to 35 Vcc 24V nominal

Outputs:

- Analog 4~20mA (3 wire)
- 3 alarm relays (configurable)
- Communication CANbus (4 wire)
- Inhibit option for servicing
- Terminal RS232 for reading and setting

Data storage: 2880 readings

Display (option):

- 2 lines alpha numeric backlit status display (gas type, concentration, alarm status, etc.)
- Status LED indicator: alarms, fault

Housing material:

Copper free aluminium alloy, optional stainless steel

Finish:

- Chemical resistant epoxy paint, RAL 9003 signal white
- Optional – Marine grade finish

Ingress protection:

- IP64 manufactured
- IP65 with water shield
- IP66 with hydrophobic screen

Cable entry: 2 x M20 or 3/4" NTP

Weight: 1.6 Kg

Operating temperature: -15°C to +55°C

Product description

The **XDI-PID** is a fixed gas detector to measure and detect (volatil organic compounds). It is an ATEX 4-20 mA output transmitter with alarm relays and digital display (optional) that can be linked to a DCS controller or used as a stand alone system.

► Photoionization lamp 10.6 eV

The XDI-PID uses a 10,6 eV photoionization lamp in diffusion mode which presents fewer contamination and maintenance problems than pump systems with the possibility of selecting 2 measuring ranges (0-50 ppm or 0-1000 ppm) for better measurement accuracy.

► Avantages

- Certified ATEX-IECEx (gas and dust)
- 2 measuring ranges for better measurement accuracy
- Moisture resistance without compensation need
- Robust design, withstands harsh environments
- 3 alarm relays configurable (alarms and/or fault)
- Large LCD backlit display for clear measurement indications and on-site configuration of the device (optional)

► XDI-PID Applications

- Industrial paints, coatings and solvents
- Chemical and petrochemical industries,
- Pharmaceutical sector
- Paper and pulp industry
- Wastewater treatment plants
- Industrial hygiene (control or surveillance)

► Model selection

Code	Designation
169-031	ATEX COV detector without display with 3 alarm relays (Alarm 1, 2 + fault)
170-031	ATEX COV detector with digital display, 3 alarm relays and magnet configuration (non-intrusive system)

► Accessories

Code	Designation
003-010	Collector cone
003-020	Universal fitting (test gas applicator)
008-311	Flow block
003-083	Detector head weather shield

List of gases detected (international designation)

Gas	Formula	CAS	IP(eV)
Acetaldehyde	C2H4O	75-07-0	10,23
Acetate de n-amyle	C7H14O2	628-63-7	9,90
Acetone	C3H6O	67-64-1	9,69
Acroleine	C3H4O	107-02-8	10,22
Alcool Allylique	C3H6O	107-18-6	9,63
Ammonia	NH3	7664-41-7	10,18
Amyl alcohol	C5H12O	71-41-0	10,00
Anhydride Acetique	C4H6O3	108-24-7	10,14
Aniline	C6H7N	62-53-3	7,70
Anisole	C7H8O	100-66-3	8,21
Arsine	AsH3	7784-42-1	9,89
Asphalt. petroleum fumes		8052-42-4	9,00
Benzaldehyde	C7H6O	100-52-7	9,49
Benzene	C6H6	71-43-2	9,24
Benzonitrile	C7H5N	100-47-0	9,62
Benzyl alcohol	C7H8O	100-51-6	8,26
Benzyl formate	C8H8O2	104-57-4	9,32
Biphenyle	C12H10	92-52-4	8,23
Bromobenzene	C6H5Br	108-86-1	8,98
Bromoethane	C2H5Br	74-96-4	10,29
Bromoethyl methyl ether. 2-	C3H7OBr	6482-24-2	10,00
Bromopropane. 1-	C3H7Br	106-94-5	10,18
Butadiene	C4H6	106-99-0	9,07
Butadiene diepoxide. 1.3-	C4H6O2	1464-53-5	10,00
Butanol. 1-	C4H10O	71-36-3	10,04
Buten-3-ol. 1-	C4H8O	598-32-3	9,20
Butene. 1-	C4H8	106-98-9	9,58
Butoxyethanol. 2-	C6H14O2	111-76-2	8,60
Butyl acrylate. n-	C7H12O2	141-32-2	8,60
Butyl lactate	C7H14O3	138-22-7	9,80
Butyl mercaptan	C4H10S	109-79-5	9,15
Butylamine. 2-	C4H11N	513-49-5	8,60
Butylamine. n-	C4H11N	109-73-9	8,71
Camphene	C10H16	565-00-4	8,10
Carbon disulfide	CS2	75-15-0	10,08
Carbon tetrabromide	CBr4	558-13-4	10,31
Carvone. R-	C10H14O	6485-40-1	9,10
Chlorine dioxide	ClO2	10049-04-4	10,36
Chloro-1.3-butadiene. 2-	C4H5Cl	126-99-8	8,79
Chlorobenzene	C6H5Cl	108-90-7	9,07
Chloroethyl methyl ether. 2-	C3H7ClO	627-42-9	9,00

Gas	Formula	CAS	IP(eV)
Chloroprene (-3)	C3H5Cl	107-05-1	10,05
Chlorotoluene	C7H7Cl	100-44-7	9,14
Chlorotoluene. o-	C7H7Cl	95-49-8	8,83
Chlorotoluene. p-	C7H7Cl	108-41-8	8,69
Chlorotrifluoroethylene	C2ClF3	79-38-9	9,81
Citral	C10H16O	5392-40-5	8,70
Citronellol	C10H20O	26489-01-0	8,50
Cresol. m-	C7H8O	108-39-4	8,97
Cresol. o-	C7H8O	95-48-7	8,97
Cresol. p-	C7H8O	106-44-5	8,97
Crotonaldehyde	C4H6O	4170-30-3	9,73
Cumene	C9H12	98-82-8	8,75
Cyclohexane	C6H12	110-82-7	9,86
Cyclohexanol	C6H12O	108-93-0	10,00
Cyclohexanone	C6H10O	108-94-1	9,40
Cyclohexene	C6H10	110-83-8	8,95
Cyclohexylamine	C6H13N	108-91-8	8,37
Cyclopentane	C5H10	287-92-3	10,52
Decane. n-	C10H22	124-18-5	9,65
Diacetone alcohol	C6H12O2	123-42-2	9,00
Dibenzoyl peroxide	C14H10O4	94-36-0	9,00
Dimethylacetamide N.N-	C4H9NO	127-19-5	8,81
Dimethylamine	C2H7N	124-40-3	8,24
Dimethylaminoethanol	C4H11NO	108-01-0	9,00
Dimethylaniline. NN-	C8H11N	121-69-7	7,12
Dimethylbutyl acetate	C8H16O2	108-84-9	7,74
Dimethylethylamine. NN-	C4H11N	598-56-1	8,50
Dimethylformamide	C3H7NO	68-12-2	9,13
Dimethylheptan-4-one. 2.6-	C9H18O	108-83-8	9,04
Dimethylhydrazine. 1.1-	C2H8N2	57-14-7	8,05
Dinitrobenzene. m-	C6H4N2O4	99-65-0	10,43
Dinitrobenzene. p-	C6H4N2O4	100-25-4	10,50
Dinonyl phthalate	C26H42O4	84-76-4	9,19
Dioxane 1.2-	C4H8O2	5703-46-8	9,20
Dioxane 1.4-	C4H8O2	123-91-1	9,13
Dipentene	C10H16	138-86-3	8,60
Diphenyl ether	C12H10O	101-84-8	8,09
Disulfur dichloride	S2Cl2	10025-67-9	10,00
Di-tert-butyl-p-cresol	C11H16O	2409-55-4	8,30
Divinylbenzene	C10H10	1321-74-0	8,20
Dodecano	C12H26O	112-53-	9,80

Gas	Formula	CAS	IP(eV)
Epichlorohydrin	C3H5ClO	106-89-8	10,20
Epoxypropyl isopropyl ether. 2.3-	C6H12O2	4016-14-2	10,00
Ethanol	C2H6O	64-17-5	10,43
Ethanolamine	C2H7NO	141-43-5	10,47
Ethoxy-2-propanol. 1-	C5H10O2	1569-02-4	9,60
Ethoxyethyl acetate. 2-	C6H12O3	111-15-9	10,00
Ethyl (S)-(-)-lactate	C5H10O3	97-64-3	10,00
Ethyl acetate	C4H8O2	141-78-6	10,01
Ethyl acrylate	C5H8O2	140-88-5	10,30
Ethyl amine	C2H7N	75-04-7	8,86
Ethyl benzene	C8H10	100-41-4	8,76
Ethyl butyrate	C6H12O2	105-54-4	9,90
Ethyl cyanoacrylate	C6H7O2N	7085-85-0	10,00
Ethyl decanoate	C12H24O2	110-38-3	9,60
Ethyl hexanoate	C8H16O2	123-66-0	9,75
Ethyl hexanol. 2-	C8H18O	105-76-7	9,80
Ethyl hexyl acrylate. 2-	C11H20O2	103-11-7	9,00
Ethyl mercaptan	C2H6S	75-08-1	9,29
Ethyl octanoate	C10H20O2	106-32-1	9,70
Ethylene	C2H4	74-85-1	10,51
Ferrocene	C10H10Fe	102-54-5	6,88
Formamide	CH3ON	75-12-7	10,20
Furfural	C5H4O2	98-01-1	9,21
Furfuryl alcohol	C5H6O2	98-00-0	9,90
Gasoline vapors		8006-61-9	9,90
Gasoline vapors 92 octane		8006-61-9	9,90
Glutaraldehyde	C5H8O2	111-30-8	9,60
Heptan-2-one	C7H14O	110-43-0	9,33
Heptan-3-one	C7H14O	106-35-4	9,02
Heptane n-	C7H16	142-82-5	9,92
Hexamethyldisilazane. 1.1.1.3.3.3-	C6H19NSi2	999-97-3	8,60
Hexamethyldisiloxane.	C6H18OSi2	107-46-0	9,00
Hexan-2-one	C6H12O	591-78-6	9,34
Hexane n-	C6H14	110-54-3	10,13
Hexene. 1-	C6H12	592-41-6	9,44
Hydrazine	H4N2	302-01-2	8,93
Hydrogen peroxide	H2O2	7722-84-1	10,54
Hydrogen sulfide	H2S	7783-06-4	10,46
Hydroquinone	C6H6O2	123-31-9	7,94
Hydroxypropyl acrylate 2-	C6H10O3	999-61-1	9,00
Iminodi(ethylamine) 2.2-	C4H13N3	111-40-0	9,00
Iminodiethanol 2.2'-	C4H11NO2	111-42-2	9,00
Indene	C9H8	95-13-6	8,81
Iodine	I2	7553-56-2	9,31
Iodoform	CHI3	75-47-8	9,25

Gas	Formula	CAS	IP(eV)
Iodomethane	CH3I	74-88-4	9,54
Isobutane	C4H10	75-28-5	10,57
Isobutanol	C4H10O	78-83-1	10,12
Isobutyl acrylate	C7H12O2	106-63-8	9,50
Isobutylene	C4H8	115-11-7	9,24
Isobutyraldehyde	C4H8O	78-84-2	9,00
Isononanol	C9H20O	2452-97-9	9,80
Isooctane	C8H18	565-75-3	9,86
Isooctanol	C8H18O	26952-21-6	9,80
Isopentane	C5H12	78-78-4	10,32
Isophorone	C9H14O	78-59-1	9,07
Isoprene	C5H8	78-79-5	8,85
Isopropanol	C3H8O	67-63-0	10,17
Isopropyl acetate	C5H10O2	108-21-4	9,99
Isopropyl chloroformate	C4H7O2Cl	108-23-6	10,20
Jet Fuel JP-4			9,00
Jet Fuel JP-5			9,00
Jet Fuel JP-8			9,00
Kerosene		008-20-6	8,00
Ketene	C2H2O	463-51-4	9,62
Maleic anhydride	C4H2O3	108-31-6	9,90
Mercaptoacetic acid	C2H4O2S	68-11-1	9,80
Mesitylene	C9H12	108-67-8	8,41
Methacrylic acid	C4H6O2	79-41-4	10,15
Methacrylonitrile	C4H5N	126-98-7	10,34
Methoxyethanol. 2-	C3H8O2	109-86-4	9,60
Methoxyethoxyethanol. 2-	C5H12O3	111-77-3	10,00
Methoxymethylethoxy-2-propanol	C7H16O3	34590-94-8	9,30
Methoxypropan-2-ol	C4H10O2	107-98-2	9,40
Methoxypropyl acetate	C6H12O3	108-65-6	9,00
Methyl acetate	C3H6O2	79-20-9	10,27
Methyl acrylate	C4H6O2	96-33-3	10,25
Methyl bromide	CH3Br	74-83-9	10,54
Methyl cyanoacrylate	C5H5O2N	137-05-3	10,00
Methyl ethyl ketone	C4H8O	78-93-3	9,51
Methyl isobutyl ketone	C6H12O	108-10-1	9,30
Methyl isothiocyanate	C2H3NS	556-61-6	9,25
Methyl mercaptan	CH4S	74-93-1	9,44
Methyl methacrylate	C5H8O2	80-62-6	9,70
Methyl salicylate	C8H8O3	119-36-8	9,70
Methyl sulfide	C2H6S	75-18-3	8,69
Methyl t-butyl ether	C5H12O	1634-04-4	9,24
Methyl-2-propen-1-ol. 2-	C4H8O	51-42-8	9,60
Methyl-2-pyrrolidinone. N-	C5H9NO	872-50-4	9,17
Methyl-4.6-dinitrophenol.	C7H6N2O5	534-52-1	9,10

Gas	Formula	CAS	IP(eV)
Methyl-5-hepten-2-one. 6-	C8H14O	110-93-0	9,40
Methylamine	CH5N	74-89-5	8,97
Methylbutan-1-ol. 3-	C5H12O	123-51-3	9,80
Methylcyclohexane	C7H14	108-87-2	9,85
Methylcyclohexanol. 4-	C7H14O	589-91-3	9,80
Methylcyclohexanone 2-	C7H12O	583-60-8	9,20
Methylheptan-3-one. 5-	C8H16O	541-85-5	9,10
Methylhexan-2-one. 5-	C7H14O	110-12-3	9,28
Methylhydrazine	CH6N2	60-34-4	8,00
Methyl-N-2,4, 6-tetranitroaniline.	C7H5N5O8	479-45-8	9,00
Methylpent-3-en-2-one. 4-	C6H10O	141-79-7	9,00
Methylpentan-2-ol. 4-	C6H14O	108-11-2	9,80
Methylpentane-2,4-diol. 2-	C6H14O2	107-41-5	9,00
Methylpropan-2-ol. 2-	C4H10O	75-65-0	9,70
Methylstyrene	C9H10	25013-15-4	8,20
Mineral oil		8042-47-5	9,00
Mineral spirits		64475-85-0	9,00
Naphthalene	C10H8	91-20-3	8,14
Nitric oxide	NO	10102-43-9	9,27
Nitroaniline 4-	C6H6N2O2	100-01-6	8,85
Nitrobenzene	C6H5NO2	98-95-3	9,92
Nitrogen trichloride	NC13	10025-85-1	10,22
Nonane. n-	C9H20	111-84-2	9,72
Norbornadiene. 2,5-	C7H8	121-46-0	8,00
Octachloronaphthalene	C10Cl8	2234-13-1	9,00
Octane. n-	C8H18	111-65-9	9,80
Octene. 1-	C8H16	111-66-0	9,43
Oxyde de diglycidyle	C6H10O3	2238-07-5	9,60
Paraffins. normal		64771-72-8	10,00
Pentacarbonyl iron	FeC5O5	13463-40-6	9,00
Pentan-2-one	C5H10O	107-87-9	9,38
Pentan-3-one	C5H10O	96-22-0	9,31
Pentandione. 2,4-	C5H8O2	123-54-6	8,85
Pentane. n-	C5H12	109-66-0	10,35
Petroleum ether		8032-32-4	10,00
Phenol	C6H6O	108-95-2	8,51
Phenyl propene. 2-	C9H10	98-83-9	8,35
Phenyl-2,3-epoxypropyl ether	C9H10O2	122-60-1	8,60
Phenylenediamine. p-	C6H8N2	106-50-3	6,89
Phosphine	PH3	7803-51-2	9,96
Picoline. 3-	C6H7N	108-99-6	9,04
Pinene. alpha	C10H16	80-56-8	8,07
Pinene. beta	C10H16	127-91-3	8,10
Piperidine	C5H11	110-89-4	8,03
Piperylen	C5H8	504-60-9	8,60

Gas	Formula	CAS	IP(eV)
Prop-2-yn-1-ol	C3H4O	107-19-7	9,00
Propan-1-ol	C3H8O	71-23-8	10,20
Propene	C3H6	115-07-1	9,73
Propionaldehyde	C3H6O	123-38-6	9,95
Propionic acid	C3H6O2	79-09-4	10,24
Propyl acetate. n-	C5H10O2	109-60-4	10,04
Propylene oxide	C3H6O	75-56-9	10,22
Propyleneimine	C3H7N	75-55-8	9,00
Pyridine	C5H5N	110-86-1	9,25
Pyridylamine 2-	C5H6N2	504-29-0	9,00
Styrene	C8H8	100-42-5	8,40
Terpinolene	C10H16	586-62-9	8,10
Tert-butanol	C4H10O	75-65-0	9,80
Tetrabromoethane. 1,1,2,2-	C2H2Br4	79-27-6	10,00
Tetracarbonylnickel	NiC4O4	13463-39-3	8,28
Tetrachloroethylene	C2Cl4	127-18-4	9,33
Tetrachloronaphthalenes. all isomers	C10H4Cl4	20020-02-4	8,50
Tetraethyl orthosilicate	C8H20O4Si	78-10-4	9,80
Tetrafluoroethylene	C2F4	116-14-3	10,12
Tetrahydrofuran	C4H8O	109-99-9	9,41
Therminol		1336-36-3	9,00
Thiophenol	C6H5SH	108-98-5	8,32
Toluene	C7H8	108-88-3	8,82
Toluene-2,4-diisocyanate	C9H6N2O2	584-84-9	8,82
Toluidine. o-	C7H9N	95-53-4	7,40
Tribromomethane	CHBr3	75-25-2	10,48
Tributylamine	C12H27N	102-82-9	7,40
Trichlorobenzene 1,2,4-	C6H3Cl3	120-82-1	9,04
Trichloroethylene	C2HCl3	79-01-6	9,45
Triethylamine	C6H15N	121-44-8	7,50
Trimethylamine	C3H9N	53-50-3	7,82
Trimethylbenzene mix	C9H12	25551-13-7	8,41
Trimethylbenzene. 1,3,5-	C9H12	108-67-8	8,39
Turpentine	C10H16	8006-64-2	8,00
Undecane. n-	C11H24	1120-21-4	9,56
Vinyl acetate	C4H6O2	108-05-2	9,19
Vinyl bromide	C2H3Br	593-60-2	9,80
Vinyl chloride	C2H3Cl	75-01-4	9,99
Vinyl-2-pyrrolidinone. 1-	C6H9NO	88-12-0	9,00
Xylene mixed isomers	C8H10	1330-20-7	8,56
Xylene. m-	C8H10	108-38-3	8,56
Xylene. o-	C8H10	95-47-6	8,56
Xylene. p-	C8H10	106-42-3	8,44
Xylidine. all	C8H11N	1300-73-8	7,50