



Portable Gas Analyzer
pGas200 Multi-parameters

Portable Gas Safety Detector

Special Application Configuration for Industrial Gas Safety Integrated Analysis

Ref: pGas200IntE

Version:2005-04-07

- **Based on CPU Intelligence**
- **Rapid Test**
- **100 frame Data log**
- **LCD 4x16 Display**
- **RS232/485 Communication**
- **Full Function Keypad Operation**
- **Memo Driven Software**
- **User Configured Analyzer**

Application

- Package test
- Relevant gas analysis
- Field smart or Laboratory test

Functions

- LCD 4×16 LCD Display
- RS232/RS485 serial port. Supporting STIMcom / Modbus communication
- Printer not Installed
- Data store and read out, or output
- Sample pump included, and suitable sample pre-process assembly
- User calibration

Specifications

- Electronic unit: BD4CCD, ADC resolution: 0.025%FS
- Electro-Chemical Sensor drift: <+/-10% /Year
- Startup time: <5min
- Response time: < 1min with 90% of change
- Sampling pressure:<1.1 kgf/cm²
- Sampling temperature: -10 °C to 50 °C

Environment Requirements:

Environmental Humidity:

Operating:0 to 100% RH, non-condensing
Storage:0 to 90% RH, non-condensing



Environmental Temperature Range:
 N:Operating -10 °C to 50 °C
 N:Storage -20 °C to 70 °C

BD4 CCD Analyzer

Environmental Temperature	-10 to 60 °C
Environmental Humidity:	10-90%

Supply: 9V Rechargeable Cell or AC Adapter
 Continuous running time: >24Hr/ each charge;
 Standby time: 7 days

Series Products

Atmosphere Environment Detector

General Organic Vapor Detector

Model	Specifications	Sensor	Life	Professional applications
pGas200-HC Hydrocarbon Analyzer	Hydrocarbon Analyzer 0-2000/30000ppm	IR	>5y	Special to hydrocarbon, free of interference from oxidant such as H ₂ S,SO ₂ ,and other possible inorganic gases
pGas200-EC2310-VOCs	Typical response: Toluene:<1~30ppm H ₂ S:<0.1~3ppm Alcohols:<1ppm-1000ppm NH ₃ & amines:<1~3000ppm H ₂ :3~30000ppm	EC	>3y	More sensitive to inorganic toxic gases

Malodorous Compounds Detector

Model	Specifications	Sensor	Life	Information
pGas200-Odor-4s Effluvium Detector	Ammonia&amines:0.75-75 mg/m ³ Hydrogen sulfide and CS ₂ :0.15-75/750 mg/m ³ Methyl mercaptan:0.5-50 mg/m ³ VOC:0-100ppm AQI:0-500	EC EC EC EC	2y 2y 1y 2y 3y	Economic detector for effluvium

* for more professional, refer to pGas2000EFF

Atmosphere Gas Safety Detector

Fuel Gas Leakage Detector

pGas200-ASM –FGD	Natural Gas Detector	Tech	Life	NG&LPG Engineering Safety Monitor
	HC: 0-5/100%;	IR	5y	市政施工安全气体探测
	H ₂ :10ppm-4%;	EC2610	2y	天然气工业安全监测
	H ₂ S:0-100ppm;	EC2610	2y	天然气输送安全监测
	THT: 0-14ppm	EC2610	18m	天然气施工安全监测
	Thiol:0-50mg/M ³	EC2610	12m	
pGas200 –ASM-CG	RH:0-99%	SMD	5y	
	Coal Gas Detector			Coal Gas Engineering Safety Monitor
	HC: 0-5/100%;	IR	5y	市政施工安全气体探测
	H ₂ :10ppm-4%;	EC2610	2y	煤气工业安全监测
	H ₂ S:0-100ppm;	EC2610	2y	煤气输送安全监测
	CO:0-10%;	EC2610	18m	煤气施工安全监测
	THT: 0-14ppm	EC2610	12m	
Thiol:0-50mg/M ³	EC2610	5y		
	SMD			

RH:0-99%

Engineering Safety Detector

Model	Specifications	Tech	Life	Information
pGas200-ASM-MES	LEL:0-100%LEL/Ex;	SM	3y	
	O2:0.1-30%;	EC	5y	
	CO:0-10%;	EC	2y	
	Chlorides:0.7-30ppm;	EC	2y	
	Fluorides:0.25-10ppm;	EC	1y	
	Sulphides:0.1-100ppm;	EC	3y	
	NH3: 0.5-1000ppm	EC	2y	
	TOX: 0-30ppm	SM	3y	

Public Safety Detector

Model	Specifications	Tech	Life	Information
pGas200-PSED	Ex:0-100%LEL/Ex	MOS	5y	能在一般工业和居民区环境定性定量探测毒性类别,主要对无机毒气有效. 探头更换周期:1 或 2y;
	TOX:0.01-5/30ppm	MOS	3y	
	O2:0.1-30%	EC	5y	
	Cl2,Br2&Cl2: 0.05-50ppm;	EC	2y	支持气体其它毒气扩展标定;
	HCl,HBr,chloride,bromides:0.7-30ppm;	EC	2y	标定周期 1y;
	F2: 0.02-1ppm;	EC	18m	出厂标定保障 16 种/类毒气(氯气,氯化氢,氟气,氟化氢,H2S,甲硫醇,二氧化
	HF, fluorides:0.25-10ppm;	EC	12m	硫, 氢氰酸,CO,SiH4, 肿, PH3,COCl2),O2 和碳氢化合物的定性定量探测;
	H2S/sulphides:0.3-100ppm;	EC	3y	用户可以自行标定其它上百种毒气.基本能实现单气准确定性定量,混合气识别率>50%(前提:所有成分都经过标定建模); 增加气种:标定费用每种 1000 元.
	Thiol/mercaptan:0.15-14ppm;	EC	12m	
	SO2:0.025-10ppm;	EC	2y	
	HCN:0.2-30ppm;	EC	18m	
	CO:0.2-30ppm;	EC	2y	
	SiH4/G3H3: 0.05-50ppm;	EC	18m	
	AsH3: 15-1000ppb;	EC	18m	
	PH3: 0.05-5/20ppm;	EC	2y	
	COCl2:0.02-1ppm;	EC	1y	
		EC		
NH3/amines:5-1000ppm;	EC	2y	环氧乙烷,乙醛,乙炔,丙烯腈,丁二烯:二硫化碳,甲硫醚, 硫化碳酰(碳酰硫),CO,表氯醇,乙醇,乙基乙酸酯,乙烯,甲醛,H2S,甲醇,甲硫醇,氧化氮,二氧化硫,乙烯乙酸酯,氯化乙烯,噻吩	
Hydrazine:10-1000ppb;	EC	12m		
VOCs: 0.1-100ppm;	EC	2y		

Industry Gas Safety Detector/Air Background

11s

	Specifications	Tech	Life	Information
pGas200-ASM-IND-11s01	HC:0-100%LEL;	IR	5y	
	CO2: 0-2%;	IR	5y	
	CO:0-2000ppm;	EC	2y	
	O2:0.1-30%;	EC	5y	
	Thiol/mercaptan:0.5-50 mg/m ³ ;	EC	18m	
	NH3/amines:0.75-75 mg/m ³ ;	EC	18m	
	Chlorides:0.7-30ppm;	EC	2y	
	HF/fluorides:0.25-10ppm;	EC	1y	
	H2S/sulphides:0.1-100ppm;	EC	2y	
	Arsine/HCN:0.2-30ppm;	EC	18m	
	SO2:0-2000ppm;	EC	2y	

10s

Model	Specifications	Repeatability	Tech	Life	Information
pGas200-ASM-IND-10s01	HC:0-100%LEL;	±2%R or 100ppm	IR	5y	
	CO2: 0-2000ppm,5%;	±40ppm+3%R	IR	5y	
	CO:0-2000ppm;	±0.5ppm or 2%R	EC	2y	
	O2:0.1-30%;	±0.15%	EC	5y	
	Thiol/mercaptan:0.5-50 mg/m ³	±0.5mg/M3	EC	18m	
	NH3/amines:0.75-75 mg/m ³	±5ppm or 10%	EC	18m	
	Chlorides:0.7-30ppm	±0.7ppm or 5%	EC	2y	
	HF/fluorides:0.25-10ppm	±0.25ppm or 5%	EC	1y	
	H2S/sulphides:0.1-100ppm	±0.3ppm or 5%	EC	2y	
	Arsine/HCN:0.2-30ppm	±0.05ppm or 10%	EC	18m	
pGas200-ASM-IND-10s02	CO2: 0-2000ppm,5%;	±40ppm+3%R	IR	5y	
	CO:0-2000ppm;	±0.5ppm or 2%R	EC	2y	
	O2:0.1-30%;	±0.15%	EC	2y	
	Cl2:0-50ppm;	±0.05ppm or 5%	EC	2y	
	H2S:0-100ppm;	±0.3ppm or 5%	EC	2y	
	SO2:0-2000ppm;	±1.5ppm or 2%	EC	2y	
	NO:0-100ppm;	±0.2ppm or 2%	EC	2y	
	NO2:0-100ppm;	±0.2ppm or 2%	EC	2y	
	HCN:0-30ppm	±0.2ppm or 2%	EC	1y	
	NH3:0-1000ppm	±0.2ppm or 5%	EC	1y	

8s

Model	Specifications	Information
pGas200-ASM-IND-8s01	LEL:0-100%LEL/Ex O2:0.1-30% TOX:0.01-5ppm Chlorides:0.7-30ppm HF/fluorides:0.25-10ppm H2S/sulphides:0.1-100ppm Arsine/HCN/CO:0.2-30ppm SiH4/GeH3/AsH3/B2H6/PH3/COCl 2:0.05-50ppm	探头更换周期:1 或 2y; 支持气体其它毒气扩展标定;

6s

Model	Specifications	Information
PGas200-ASM-IND-6s01	LEL:0-100%LEL/Ex NH3:1-1000ppm; H2:0-4%Vol; CO:0-4%Vol; CH4:300ppm-10%Vol; H2S:0-2000ppm;	工业气体环境安全检测 短时间工艺成分分析; 设备维护检修泄露检测

5s

Model	Specifications	Tech	Life	Information
PGas200-ASM-5s01	Ex: 0-100%LEL	EC	3y	Ex 传感器对绝大多数有机可燃气体有响应,包括 CO 和 H2。 环境安全检测;
	H2S:0.15-75/750 mg/m ³	EC	2y	
	CO:0-500/1500ppm	EC	2y	
	O2:0-30%Vol	EC	5y	
	CO2:0-2000ppm/5%Vol	IR	10y	

Model	Specifications	Tech	Life	Information
PGas200-ASM-5s02	HC: 0-100%VOI	IR	10y	HC 传感器对绝大多数有机碳氢可燃气体有响应,对 CO 和 H2 无反映。 重要工业,航海船舶环境安全检测;
	H2S:0.15-75/750 mg/m ³	EC	2y	
	CO:0-500/1500ppm	EC	2y	
	O2:0-30%Vol	EC	5y	
	CO2:0-2000ppm/5%Vol	IR	10y	

4s

Model	Specifications	Tech	Life	Information
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PGas200-ASM-IND-4s03	NH3:1-1000ppm; HCl:0.7-30ppm Cl2:0.05-5/50ppm; COCl2:0.02-1ppm	工业气体环境安全检测 设备维护检修泄露检测
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3s

Model	Specifications	Tech	Life	Information
PGas200-ASM-3s01	PH3:0.05-50 ppm CO:0-500/1500ppm O2:0-30%Vol	EC EC EC	2y 2y 5y	

3s

Model	Specifications	Tech	Life	Information
PGas200-ASM-3s02	F2:0.02-1 ppm HF:0.25-10ppm Cl2:0.05-5/50ppm;	EC EC EC	18 月 1y 2y	Cl2 传感器同时对碘有响应

2S

Model	Specifications	Tech	Life	Information
PGas200-ASM-2s01	CS2: 0-100ppm O2: 0.00% to 30/100%;	EC EC	2y 5y	CS2 传感器只能用于没有 H2S 的大气或其他惰性气体中。

Shipping Safety Detectpr

Model	Specifications	Tech	Life	Information
PGas200-ASM-4s01	Ex: 0-100%LEL H2S:0.15-75/750 mg/m ³ CO:0-500/1500ppm O2:0-30%Vol	EC EC EC EC	3y 2y 2y 5y	Ex 传感器对绝大多数有机可燃气体有响应,包括 CO 和 H2。 环境安全检测;
PGas200-ASM-4s02	HC: 0-100%VOI H2S:0.15-75/750 mg/m ³ CO:0-500/1500ppm O2:0-30%Vol	IR NIR IR NIR	10y 10y 10y 10y	HC 传感器对绝大多数有机碳氢可燃气体有响应,对 CO 和 H2 无反映。 重要工业,航海船舶环境安全检测;

Model	Specifications	Tech	Life	Information
PGas200-ASM-IND-4s03	NH3:1-1000ppm; HCl:0.7-30ppm; Cl2:0.05-5/50ppm; COCl2:0.02-1ppm;			工业气体环境安全检测 设备维护检修泄露检测

Silicon Industry Safety Detector

Model	Specifications	Tech	Life	Information
PGas200-ASM-3s01	HC: 0-100%LEL SiH4:0.05-50 ppm Chlorides:0.7-30ppm	IR EC EC	5y 2y 2y	HC 碳氢传感器只对有机碳氢化合物有响应,不包括 CO 和 H2。 氯 SiH4 传感器对大多数氯 SiH4 有响应。 SiH4 传感器只对 SiH4 有响应。 环境安全检测;
PGas200-ASM-3s02	HC: 0-100%LEL SiH4:0.05-50 ppm Chlorides:0-6%Vol	IR EC IR	5y 2y 5y	HC 碳氢传感器只对有机碳氢化合物有响应,不包括 CO 和 H2。 氯 SiH4 传感器对大多数氯 SiH4 有响应。 SiH4 传感器只对 SiH4 有响应。 环境安全检测;

Semiconductor Industry Gas Safety Detector

Model	Specifications	Tech	Life	Information
pGas200-ASM-SC-6s	PH3-4PH	EC		扩散式采样; 半导体车间全毒气报警, 有一定的区辨能力. Chlorides 对 HCl, SiH ₂ Cl ₂ , S ₂ Cl ₂ , GeCl ₄ , PCl ₃ , PCl ₅ , POCl ₃ , SiCl ₄ , TiCl ₄ , SiHCl ₃ , C ₃ Cl ₃ N ₃ 都有响应; Fluorides 对 HF, COF ₂ , S ₂ F ₁₀ , SO ₂ F ₂ , SnF ₄ , C ₃ F ₃ N ₃ 都有响应; Gas200 通过标定系统甚至可能对 H ₂ B ₆ , GeH ₄ , H ₂ Se 进行定性定量探测.
	SiH ₄ -4SL	EC		
	AsH ₃ -3E1	EC		
	Chlorides	EC		
	Fluorides	EC		
	H ₂	EC		
PGas200-ASM-SC_4s	H:0-5/20ppm	EC		扩散式采样: 半导体车间全毒气报警 Hydrides-3E50 对 AsH ₃ , B ₂ H ₆ , GeH ₃ , PH ₃ , SiH ₄ , SbH ₃ , H ₂ Se 都有响应;
	Cl:0-30ppm	EC		
	F:0-10ppm	EC		
	H ₂ :0-4%	EC		
PGas200-ASM-SC_3s1	H:0-5/20ppm	EC		扩散式采样; 半导体车间全毒气报警
	Cl:0-30ppm	EC		
	F:0-10ppm	EC		
PGas200-ASM-SC_3s2	H:0-5/20ppm	EC		扩散式采样; 半导体车间全毒气报警 TOX-ADS02 对 Chlorides, HF/fluorides, 溴化物, H ₂ S/sulphides, 胺, 苯类皆有高灵敏度响应.
	Tox:0-30ppm	EC		
	H ₂ :0-4%	EC		

* H:hydrides; Cl: Chlorides, and HCl; F=HF/fluorides;

Possible Available Sensors

GAS	FULL-SCALE RANGES
Acetic Acid	100, 200 ppm
Acetone	100, 200, 500, 1000, 5000 ppm; % LEL
Acetonitrile	100 ppm
Acetylene	50 ppm; % LEL; 3% by Volume
Acrolein (Acrylaldehyde)	50 ppm
Acrylic Acid	100 ppm
Acrylonitrile	50, 60, 80, 100, 200, 500 ppm; % LEL
Allyl Alcohol	% LEL
Allyl Chloride	200 ppm
Ammonia	50, 70, 75, 100, 150, 200, 300, 400, 500, 1000, 2000, 2500, 4000, 5000 ppm; 1%, 2%, 10% by Vol., 10%, 25%, 100% LEL
Anisole	100 ppm
Arsenic Pentafluoride	5 ppm
Arsine	1, 10 ppm
Benzene	50, 75, 100, 1000 ppm; % LEL
Biphenyl	50%, 100% LEL
Boron Trichloride	500 ppm
Boron Trifluoride	500 ppm
Bromine	20 ppm
Butadiene	50, 100, 3000 ppm; % LEL
Butane	400, 1000 ppm; 100%, 200% LEL
Butanol	1000 ppm, 100% LEL
Butene	100% LEL
Butyl Acetate	100 ppm; % LEL
Carbon Disulfide	50, 60, 100 ppm; 5% by Volume
Carbon Monoxide	50, 100, 150, 200, 250, 300, 500, 1000, 3000, 5000 ppm; 3%, 5% by Volume, % LEL
Carbon Tetrachloride	50, 100, 10000 ppm
Cellosolve Acetate	100 ppm
Chlorine	10, 20, 50, 100, 200 ppm
Chlorine Dioxide	10, 20 ppm
Chlorobutadiene	100% LEL
Chloroethanol	200 ppm
Chloroform	50, 100, 200 ppm
Chlorotrifluoroethylene	100% LEL

Cumene	100% LEL
Cyanogen Chloride	20 ppm
Cyclohexane	100 ppm, 100% LEL
Cyclopentane	50 ppm
Deuterium	50%, 100% LEL
Diborane	10, 50 ppm
Dibromoethane	50 ppm
Dibutylamine	100% LEL
Dichlorobutene	1% by Volume
Dichloroethane (EDC)	50, 100 ppm, % LEL
Dichlorofluoroethane	100, 1000 ppm
Dichloropentadiene	50 ppm
Dichlorosilane	50, 100 ppm
Diesel Fuel	50 ppm; 100% LEL
Diethyl Benzene	100% LEL
Diethyl Sulfide	10 ppm
Difluorochloroethane	100% LEL
Difluoroethane (152A)	100% LEL
Dimethyl Ether	100% LEL
Dimethylamine (DMA)	30, 50 ppm
Epichlorohydrin	50, 100, 500, 1000 ppm
Ethane	1000 ppm
Ethanol	200, 1000, 2000 ppm; % LEL
Ethyl Acetate	200, 1000 ppm; % LEL
Ethyl Benzene	200 ppm; % LEL
Ethyl Chloride	100 ppm; % LEL
Ethyl Chlorocarbonate	1% by Volume
Ethyl Ether	100, 800, 1000 ppm; % LEL
Ethylene	100, 1000, 1200 ppm; % LEL
Ethylene Oxide	5, 10, 20, 30, 50, 75, 100, 150, 200, 300, 1000, 1500, 2000, 3000 ppm; % LEL
Fluorine	20, 100 ppm
Formaldehyde	15, 50, 100, 500, 1000 ppm
Freon-11	1000, 2000, 5000 ppm
Freon-12	1000, 2000, 3000 ppm
Freon-22	100, 200, 500, 1000, 2000 ppm
Freon-113	100, 200, 500, 1000, 2000 ppm; 1% by Vol.
Freon-114	1000, 2000, 20000 ppm
Freon-123	1000 ppm
Fuel Oil or Kerosene	100% LEL
Gasoline	100, 1000, 2000, 20000 ppm; % LEL
Germane	10, 50 ppm
Heptane	1000 ppm, % LEL
Hexane	50, 100, 200, 2000, 2500, 3000 ppm, % LEL
Hexene	% LEL
Hydrazine	5, 10, 20, 100, 1000 ppm, 1% by Volume
Dimethyl Hydrazine	5, 10, 20, 100, 1000 ppm, 1% by Volume
Hydrogen	50, 100, 200, 500, 1000, 2000, 5000 ppm; 3%, 5% by Vol., 2% to 100% LEL
Hydrogen Bromide	50 ppm
Hydrogen Chloride	50, 100, 200, 400, 500, 1000 ppm
Hydrogen Cyanide	20, 30, 50, 100, 200, 1000, 10000 ppm
Hydrogen Fluoride	20, 50, 100, 200 ppm
Hydrogen Sulfide	5, 10, 20, 30, 50, 100, 300, 1000 ppm; % LEL
Isobutane	1000, 3000 ppm, % LEL
Isobutylene	% LEL
Isopentane	1000 ppm
Isoprene	% LEL
Isopropanol	200, 400, 500, 1000 ppm; % LEL
Mercaptan (TBM)	0-50 mg/M3(0-14ppm)
Methane	100, 200, 1000, 1500, 2000, 5000 ppm; 1%, 2% by Volume, 100%, 200% LEL
Methanol	200, 300, 400, 500, 1000, 2000, 5000 ppm; 15%, 30%, 100% LEL
Methyl Acetate	30 ppm
Methyl Acrylate	60 ppm
Methyl Bromide	20, 50, 60, 100, 500, 1000, 10000; 40,000 ppm
Methyl Butanol	% LEL
Methyl Cellosolve	% LEL

Methyl Chloride	100, 200, 300, 2000, 10000 ppm; % LEL
Methyl Ethyl Ketone	100, 500, 1000, 4000 ppm; 100% LEL
Methyl Hydrazine	5 ppm
Methyl Isobutyl Ketone	200, 500, 2000 ppm; 50%, 100% LEL
Methyl Mercaptan	30 ppm
Methyl Methacrylate	100 ppm; % LEL
Methyl-Tert Butyl Ether	100% LEL
Methylene Chloride	20, 100, 200, 300, 400, 500, 600, 1000, 2000, 3000, 5000 ppm; % LEL
Mineral Spirits	200, 3000 ppm; % LEL
Monochlorobenzene	100% LEL
Monoethylamine	30, 100, 1000 ppm
Morpholine	500 ppm
Naptha	1000 ppm, 100% LEL
Natural Gas	1000, 2000 ppm; 2%, 4% by Volume, % LEL
Nitric Oxide	20, 50 ppm
Nitrogen Dioxide	20, 50, 100 ppm
Nitrogen Trifluoride	50, 500, 1000 ppm
Nonane	2000 ppm
Pentane	200, 1000 ppm, % LEL
Perchloroethylene	200, 1000, 2000, 20000 ppm
Phenol	100 ppm
Phosgene	50 ppm
Phosphine	3, 5, 10, 20, 30, 50 ppm
Phosphorus Oxychloride	200 ppm
Picoline	% LEL
Propane	100, 1000 ppm; 100% LEL
Propylene	100, 200, 1000, 5000 ppm; %LEL
Propylene Oxide	100 ppm; % LEL
Silane	10, 20, 50 ppm
Silicon Tetrachloride	1000 ppm
Silicon Tetrafluoride	1000 ppm
Styrene	200, 300 ppm; % LEL
Sulfur Dioxide	50, 100 ppm
Tetrahydrofuran	200, 300, 1000 ppm; % LEL
Tetrahydrothiophene (THT)	0-50mg/M3
Tetraline	100 ppm
Toluene	50, 100, 200, 500, 2000, 5000 ppm; % LEL
Toluene Diisocyanate	15 ppm
Trichloroethane	50, 100, 500, 1000 ppm; 1% by Volume
Trichloroethylene	50, 100, 200, 300, 500, 1000, 2000 ppm; %LEL
Triethylamine (TEA)	100 ppm
Trifluoroethanol	25, 100 ppm
Trimethylamine (TMA)	50 ppm
Tungsten Hexafluoride	50 ppm
Turpentine	% LEL
Vinyl Acetate	1000 ppm; % LEL
Vinyl Chloride	20, 50, 100, 200, 400, 500, 1000, 4000, 10000 ppm; 10%, 100% LEL
Vinylidene Chloride	50 ppm
Xylene	100, 200, 300, 1000 ppm, 1% by Volume
