



Chemical Instrument

pGas2000 Family  
pAir2000R Multi-parameters

# Portable Indoor Air Analyzer

*Special Application Configuration for Indoor Air Quality Analysis*

Ref: pAir2000R\_IntE

Version:2.0

Revision:2004-11-19

- 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

## About Air Quality Analysis

This instrument was designed to satisfy the popular demand of air quality inspection, specially for field smart measurement. The low detect limit was limited by the sensitivity of sensors that supply at present. The more terrible problem in general analysis is cross interference. It was improved by our special method embedded in this analyzer. Better results is always based on professional assistance, calibration, and maintenance.

It was emphasized to use this instrument for normal air quality test. Results might be unexpected when used in unknown area, heavy contaminated municipal location, and complicated background of industry city.

Every sensor might be poisoned or interfered by other similar gases. If you want to extant the application in unknown air, you need some chemical treatment to verify it before set it as general method to analyze the air, and/or append some professional skills to get exact results, such as gas filter etc.

We may offer some method to overcome common problem.

## Application

- Air quality test
- Atmosphere test
- Package test
- Relevant gas analysis
- Field smart or Laboratory test

## Functions

- LCD 4×16LCD Display
- RS232/RS485 serial port. Supporting STIMcom / Modbus communication
- Printer 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/cm<sup>2</sup>
- Sampling temperature: -10 °C to 50 °C

## Environment Requirements:

Environmental Humidity:

Operating:0 to 95% RH, non-condensing;  
Storage:0 to 90% RH, non-condensing;

Environmental Temperature Range:

N:Operating -0 °C to 50 °C;  
N:Storage: 0 °C to 50 °C;

BD4 CCD Analyzer

Environmental Temperature -20 to 60 °C

Environmental Humidity: 0-90%

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

Standby time: 7 days;

Package: NEMA1/4/4X, IP10/56;

Size: 460x350x250 mm;

## Supported Standard:


- GB / T 18883—2002, <Domestic Air Quality Standard >
- GB 3095—1996, <Ambient Air Quality Standard>.

## Choice List of Parameters for Atmosphere

No	Parameter	Range	Temp	Repeatability	Life/year	Drift/Y		-Pro	-VOC
1	T	-40-100℃		+/-0.2%	5		included	√	
2	RH	0-99%RH	-30-70	+/-2%R	5	<5%	included	√	
3	Air velocity	0.01-20m/s	-30-70	+/-10%R	5			√	
4	SO <sub>2</sub>	0.025-10/100ppm	-20-50	+/-2%R	2	<2%	EC	√	
5	H <sub>2</sub> S	0.1-50/500ppm	-40-50	+/-1%R	2	<-2%	EC		
6	CO	0.1-500/1000ppm	-15-40	+/-2%R	3	<5%	EC	√	
7	CO <sub>2</sub>	2-2000ppm	-15-40	<+/-1%R	3	<5%	IR	√	
8	NO <sub>2</sub>	0.01-10ppm	-10-40	+/-2%R	5	<5%	LNIR	√	
9	NO	0.5-100/300ppm	-20-50	+/-2%R	2	<-2%	EC		
11	NH <sub>3</sub>	0.1-100ppm	-25-30	+/-10%R	1	<-10%	LS IR	®	®
12	TVOC	0.01-1000ppm	-20-50	+/-5%	5	<5%	LS IR	®	®
13	O <sub>3</sub>	0.05-50ppm	-10-40	+/-5%	2	<4%	LS IR	®	®
14	TSP	0.01-2/20mg/M <sup>3</sup>	-10-40	+/-10%R	5		LS		
14	PM <sub>10</sub>	0.01-2/20mg/M <sup>3</sup>	-10-40	+/-10%R	5		By filter	√	
14	PM <sub>2.5</sub>	0.01-100mg/M <sup>3</sup>	-10-40	+/-10%R	5		By filter		
15	F <sup>-</sup>	0.25-10ppm	-20-35	<5%F	1	10%/m	EC		
16	B[a]P	0.015-1.5mg/NM <sup>3</sup>	-10-40	<2%	5	<5%	LS IR	®	®
17	CH <sub>2</sub> O	0.05-10.0ppm	-20-50	<2%	5		LS IR	®	®
18	C <sub>6</sub> H <sub>6</sub>	0.03-30ppm	-20-50	<2%	5		LS IR	®	®
19	C <sub>7</sub> H <sub>8</sub>	0.04-50ppm	-20-50	<2%	5		LS IR	®	®
20	C <sub>8</sub> H <sub>10</sub>	0.04-50ppm	-20-50	<2%	5		LS IR	®	®
21	Radon	0-1000Bq/NM <sup>3</sup>					①	√	

22	TNB	0-25000CFU/NM <sup>3</sup>					●Bacterium		
23	Pb						●		
24	Noise	35-130dB	0-40	+/-1	5		Vibration		
25	CH <sub>3</sub> OH	0.05-50ppm	-20-50	<2%	5	<5%	LS IR	®	®

● Not available ● Specially

 For ppb level clean air analysis and critical parameter test, please refer to pAir4800 Analyzer

 If any special, please fill the above table and attached to your order.

**Package standard:** NEMA 1/4/4X, IP10/56

**Guaranteed:** 2 years

## BigDipper Technochem Institute

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### **Products Catalogue:**

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