Kjeldahl Apparatus

Semi Automatic Kjeldahl Nitrogen Analyzer (Kjeldahl Distiller)

Features for BKN-984:

∗ 4.3 inch LCD display.

∗ Manual/automatic mode can be switched freely.

∗ Automatic accurate distribute alkali and boric acid solution.

∗ Automatic fault detection function, audio and visual alarm system.

∗ Multi-protection function, such as safety door, tube position protection, cooling water testing protection, etc.

BKN-984

Fully Automatic Kjeldahl Nitrogen Analyzer

Features for BKN-110F and BKN-986:

∗ Large LCD touch screen.

∗ Colorimetric titration device.

∗ Sample method can be edited and stored.

∗ Automatic distillation, titration, calculation, printing, drain and cleaning function.

∗ Dual distillation mode, can adjust the sequence of solution adding(Only for BKN-110F).

∗ Standard built-in printer, optional CAN and RS-485 interface for BKN-110F Model.

BKN-110F/BKN-986

Technical Parameters:

Model	BKN-984	BKN-110F	BKN-986
Water Consumption	1.5L/Min		
Ambient Temperature	5 ~40℃		
Ambient Humidity	80%		
Measure Range	0.1mg~200mg		
Analysis Time	5~10min		
Recovery Ratio	≥99.5%		
Sample Amount	Solid ≤6g; Liquid ≤16ml	Solid ≤ 5g; Liquid ≤20ml	
Burette Accuracy	/	1.0μL/step	2μL/step
Reproducibility	/	±0.5%	
Consumption	2000W		
Power Supply	AC110/220V±10%, 50/60Hz		
Packing Size (W*D*H)	655*528*880mm	Main body: 585*525*900mm Accessories: 605*600*355mm	Main body: 585*525*905mm Accessories: 600*600*360mm
Gross Weight	45kg	Main body: 52.7kg, Accessories: 12.5kg	Main body: 50.3kg, Accessories: 13.4kg

Functions List	BKN-984	BKN-110F	BKN-986
Variable Steam Generator	•	•	•
Cooling Water Pressure Monitor	•	•	•
Cooling Water Temperature Monitor	•	•	•
Automatic Alkali Solution Adding	•	•	•
Automatic Dilute Water	•	•	•
Auto Receiver Solution Adding	•	•	•
Tube Emptying		•	
Removable Drain Tray	•	•	•
Safety Door	•	•	•
Tube on Position Sensor	•	•	
Tube Replacement Sensor	•		
Colorimetric Titration Device		•	•
Results Calculation		•	•
Result and Data Storing		•	•
Built-in Printer		•	•
Trouble Shooting Self-detecting Functions	•	•	•
Titration While Distillation		•	

Kjeldahl Digestion Furnace

Technical Parameters:

Model	BKD-20F
Temp.Range	RT+5~450℃
Temp.Accuracy	±1℃
Heating Method	Infrared heating and high-purity graphite conduction
Heating Insulation Method	Ceramic fiber and unique air duct insulation
Digestion Tube Capacity	300ml
Capacity/Batch	20 pcs/batch
Consumption	3600W
Power Supply	AC110/220V±10%,50/60Hz
Packing Size(W*D*H)	650*540*470mm
Gross Weight	33kg

GCH-03 Gas Collection Hood

Features:

✷ Using PFA sealing cap, longer life, dealing effect well

✷ Clip-on sealing cap, easy for changing

✷ Specialized water jet vacuum pump is adopted, don't need electric power

✷ Drip tray design, reduce corrosion damage from acid solutions

✷ Package Size: 530*350*290mm

✷ Gross Weight: 8kg

Exhaust System Scrubber

Features:

✷ The anti-corrosion processed vacuum pump with low noise, large suction, low waste gas exhausting and power saving function

✷ Unique efficient neutralization device expand the contact area between gas and solutions. It is available for acid gas neutralizing, absorbing, and letting the operating environment safety.

✷ The triangle filtration system including water filtration, alkali neutralizing and activated carbon filtration. It has perfect neutralizing and absorbing function, can neutralize acid mist and reacting gas which is generated from Kjeldahl processing or any other processing.

✷ PTFE anti-corrosion design of the pipe system enhance equipment's life.

✷ Flow rate is adjustable, let operation flexibly.

Technical Parameters:

Model	ES402
Max. Flow Rate	3m³/H
Max. Negative Pressure	0.05MPa
Neutralization Methods	Water, Alkali and Carbon
External Size(W*D*H)	390*340*550mm
Packing Size(W*D*H)	570*440*665mm
Gross Weight	30.9kg

Semi Automatic Kjeldahl Nitrogen Analyzer (Kjeldahl Distiller)

Features:

✷ 6 inch LCD display.   ✷ Manual/automatic mode can be switched freely.

✷ Siemens control system, with high precision and stability.

✷ 10 groups of programs, meet the demand of different customers.

✷ Automatic control of adding alkali and boric acid solution, dilution and elution.

✷ Multi-protection function, such as safety door, overpressure protection, water shortage protection, etc.

Technical Parameters:

Model	BKN-983
Measuring Range	0.1~250mgN
Recovery Ratio	≥99.5%
Repeatability	±0.5%
Sample Amount	Solid＜6g; liquid＜16ml
Distillation Speed	3~4min/sample
Distillation Time	0~999s
Cooling Water Consumption	1.2-3L/min
Requirement of Cooling Water	＜18℃
Consumption	2000W
Power Supply	AC220V, 50/60Hz
Packing Size(W*D*H)	Main body: 630*540*810mm
	Accessories: 530*530*540mm
Gross Weight	Main body: 37kg
	Accessories: 7kg

BKN-983

Fully Automatic Kjeldahl Nitrogen Analyzer

Features:

✷ Large LCD touch screen.

✷ Siemens control system, with high precision and stability.

✷ Alkali solution could be added repeatedly in the process of distillation.

✷ Multi-protection function,such as safety door, overpressure protection, water shortage protection,etc.

Additional Features of BKN-987A:

✷ It could show the titration curve.

✷ One key to wash the alkali liquor pipes.

✷ Automatically discharge the waste in the digestive tubes.

BKN-987/A

Technical Parameters:

Model	BKN-987	BKN-987A
Working Process	Adding quantitative sample dilution, alkali liquor and absorption liquid; Automatically finishing distillation, titration, print and liquid-discharging.	
Measurement Range	0.1~240mgN	
Sample Amount	Solid＜6g; liquid＜16ml	
Measurement Time	4~6 minutes	
Titration Precision	0.75µL/step	
Requirement of Cooling Water	＜18℃	
Cooling Water Consumption	1.5L/min (Distillation process)	
Titration Solution Concentration	Direct titration samples with 4 titration concentrations of 0.1mol, 0.5mol and 1mol	
Titration System	High-precision plunger type titration system	High-precision peristaltic titration system
Repeatability	±0.5%	
Recovery Ratio	≥99.5%	
Data Storage	140,000 groups	
Consumption	2000w	
Power Supply	AC220V, 50/60Hz	
Packing Size (W*D*H)	Main body: 630*540*810mm	
	Accessories: 530*530*540mm	
Gross Weight	Main body: 57kg	
	Accessories: 7kg	

Kjeldahl Digestion Furnace

Technical Parameters:

Model	BKD-8B
Temp.Range	RT~400℃
Temp. Precision	±1℃
Heating Pipe	Aluminium alloy pipe (Nichrome wire)
Heating Speed	20℃/min
Heating Holes	8
Digestion Tube Size	300ml±0.25ml
Consumption	2KW
Power Supply	AC220V, 50/60Hz
Packing size(W*D*H)	660*500*295mm
Gross weight	20kg

Anaerobic Jar

Features:

﹡ Excellent airtight performance, avoiding any undue leakage
﹡ PMMA material, extremely smooth surface, shock and impact resistant
﹡ Jar and lid are both transparent, sealing between lid and jar consists of an excellent quality O-ring
﹡ Strong jar-lid-clamp construction, guarantee the overall airtight performance
﹡ Colored stainless steel clamp with power electrostatic painting, durable and convenient for experimental management
﹡ Adopting quick snap-shut coupling, enabling quick connection to the system in one swift move

BK-AJH Series   BK-AJG Series

Technical Parameters:

BK-AJH Series Pumping Type Jar: 3 to 5 minutes every time

Model	Contents	Petri Dish Holder	Packing Size(L*W*H)	Gross Weight
BK-AJH015	1stack of 6 dishes (φ9-10cm)	15R	245*215*295mm	2.3kg
	ø =130mm, h=150mm; 1.5liter			
BK-AJH025	1stack of 12 dishes (φ9-10cm)	25R	245*215*395mm	2.8kg
	ø =130mm, h=240mm; 2.5liter			
BK-AJH035	1stack of 18 dishes (φ9-10cm)	15/25R	245*215*495mm	3.3kg
	ø =130mm, h=330mm; 3.5liter			
BK-AJH050	3 stacks of 6 dishes (φ9-10cm)	3/25R	370*370*340mm	5.9kg
	ø =240mm, h=120mm; 5liter			
BK-AJH070	3 stacks of 8 dishes (φ9-10cm)	3/25R	370*370*370mm	6.3kg
	ø =240mm, h=160mm; 7liter			
BK-AJH100	3 stacks of 12 dishes (φ9-10cm)	3/25R	370*370*470mm	7.3kg
	ø =240mm, h=230mm; 10liter			

BK-AJG Series Hermetic Type Jar: About 4 hours every time

Model	Contents	Petri Dish Holder	Packing Size(L*W*H)	Gross Weight
BK-AJG015	1stack of 6 dishes (φ9-10cm)	15R	245*215*295mm	2.0kg
BK-AJG025	1stack of 12 dishes (φ9-10cm)	25R	245*215*395mm	2.5kg
BK-AJG035	1stack of 18dishes (φ9-10cm)	15/25R	245*215*495mm	3.0kg
BK-AJG050	3 stacks of 6 dishes (φ9-10cm)	3/15R	370*370*340mm	5.6kg
BK-AJG070	3 stacks of 8 dishes (φ9-10cm)	3/15R	370*370*370mm	6.0kg
BK-AJG100	3 stacks of 12 dishes (φ9-10cm)	3/25R	370*370*470mm	7.0kg

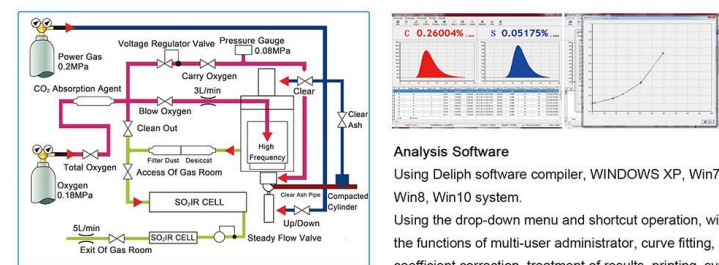# Carbon & Sulfur Analyzer

BK-CSA5

Introductions:

High-frequency Infrared Carbon & Sulfur Analyzer can determine the percentage of carbon and sulfur in steel, iron, alloy, nonferrous metal, cement, mineral, glass and other material.

Technical Parameters:

Working Principle	High-frequency inductive combustion and infrared absorption system
Sample Weight (Solid steel)	Standard 0.5g
Accuracy	C/S: 0.1ppm
Analysis Time	20-100s adjustable (normally: 35s)
Working Cycle	24 hours

The difference between BK-CSA5 and BK-CSA6:

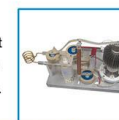| Model	BK-CSA5	BK-CSA6
Appearance	Desktop detector, with desktop high-frequency furnace, save space	Separate work station, with vertical high-frequency furnace
Analysis Range	C: 0.0005%-6.0000% (can be extended to 99.999%) S: 0.0005%-0.35000% (can be extended to 99.999%)	C: 0.0001%-10.0000% (can be extended to 99.999%) S: 0.0001%-2.0000% (can be extended to 99.999%)
Analysis Pool	2 pools	2 pools (optional 4 pools)
Consumption	2.2KW	2.5KW
Power Supply	AC220V±10%, 50/60Hz	
Package Size(W*D*H)	1380*760*980mm	1550*750*910mm, 740*580*1410mm
Gross Weight	200kg	330kg
Standard Accessories	Main unit, high frequency automatic inductive combustion furnace, electric balance, computer, printer	
	1000 times effective analysis of spare parts	

BK-CSA5/BK-CSA6 Gas Circuit Diagram

Analysis Software

Using Deliph software compiler, WINDOWS XP, Win7, Win8, Win10 system.

Using the drop-down menu and shortcut operation, with the functions of multi-user administrator, curve fitting, coefficient correction, treatment of results, printing, system diagnosis and others.

High Frequency Oscillating Circuit

Current / Voltage / Power / Choosing the way to regulate the furnace temperature, suitable to various materials of samples.
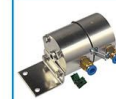
Control Circuit

Double CPU modular design, high of integration, stable and reliable. 24 bit high speed sampling chip, high sampling precision.

High Precision Pump

In response to the input pressure change, to ensure that the analysis of gas flow. Constant output, so as to ensure the stable and reliable analysis results.

Infrared Detecting Pool

Gold-plating carbon sulfur analysis pool and high precision of pyroelectric infrared detector. New platnum infrared light source, heating duration, spectral characteristics of high efficiency. Microstepping motor, good thermal stability.
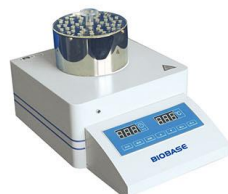

BK-CSA6

COD Analyzer

Application:

＊ It is widely used in water quality monitoring in environmental protection, petroleum, chemical industries, health, etc.

BK-COD1   Digester BK-D-1

Features:

＊ LCD display

＊ Dichromate colorimetric method, LED light source, long service life

＊ Two-point calibration (zero and full scale calibration)

＊ Measurements can be displayed directly, needless to count

＊ Support to connect with PC through USB interface

＊ Data can be consulted, deleted and printed

Technical Parameters:

Model		BK-COD1
Measuring Principle		Dichromate colorimetric method
Range	COD	0.0~1500mg/L
	Electrolysis Current Divide	—
Accuracy	Basic Accuracy	≤150mg/L: ±8% reading ±1mg/L; ≥150mg/L: ±8% reading
	Repeatability	3% reading
Stability		±2% (reading)/15min
Calibration		Two-point calibration(zero and full scalecalibration)
Data Storage		200 data with time-and-date stamp
Digester BK-D-1	Digestion Method	Sealing reflux method（could dispelling 21 samples simultaneously）
	Digestion Temperature	100~165℃
	Digestion Time	0~120min
Power Supply		AC110/220V±10%, 50/60Hz
Standard Accessory		BK-D-1 digester
Package Size(W*D*H)		BK-COD1: 370*305*330mm, Digester: 575*435*285mm
Gross Weight		8.5kg

Portable Turbidimeter

Portable Turbidimeter

Features:

＊Narrow band filter system, less susceptible to interference of light.(For BK-T201/ BK-T202) Cold light source, narrowband interference optical system. (For BK-T201A/ BK-T202A)

＊ Large LCD display

＊ Able to store standard 10 curve and 199 measurements value (For BK-T201/ BK-T202); 20 curve and 199 measurements value (For BK-T201A/ BK-T202A)

＊ Anticorrosive ABS main body, waterproof IP65 design

＊ 16-bit single chip microcomputer system

＊ Data protection function of power failure

＊ Could charge lithium-ion battery (For BK-T201A/ BK-T202A)

＊ USB port included (For BK-T201A/ BK-T202A)

Technical Parameters:

Model	BK-T201	BK-T202	BK-T201A	BK-T202A
Measuring Range(NTU)	0~400	0~1000	0~400	0~1000
Basic Error(F.S)	≤± 2%		≤± 1%	
Repeatability(F.S)	≤ ± 2%		≤ ± 1%	
Minimum Resolution(NTU)	0.01			
Drift Per Hour(NTU)	＜ 0.1			
Power Supply	AC110/220V±10%,50/60HZ			
Package Size	270*270*180mm			
Gross Weight	2.5kg			

Benchtop Turbidimeter

Features:

＊ Narrow band filter system, less susceptible to interference of light

＊ Large LCD display

＊ Able to store standard 10 curve and 199 measurement value (For BK-LT3A / BK-LT3B); 10 curve and 500 measurement value (For BK-T3A/BK-T3B)

＊ Anticorrosive ABS body

＊ 16-bit single chip microcomputer system

＊ Printing function, USB port included (For BK-T3A/BK-T3B)

BK-T3A/BK-T3B

Technical Parameters:

Model	BK-LT3A	BK-LT3B	BK-T3A	BK-T3B
Measuring Range(NTU)	0~400	0~1000	0~400	0~1000
Basic Error(F.S)	≤± 2%			
Repeatability(F.S)	≤ ± 2%			
Minimum Resolution(NTU)	0.01			
Drift Per Hour(NTU)	＜0.1			
Power Supply	AC110/220V±10%,50/60HZ			
Package Size	270*270*180mm			
Gross Weight	3kg			

BK-LT3A/BK-LT3B

Combination Emergency Shower Eye Washer

SEW-C1   SEW-C2

Material: Stainless steel, firm and chemical resistant.

Eye washer is suitable for cleaning eyes, face and hands; the spray head can be use of washing the whole body.

Switch of the spray shower is controlled by the top of the handle, the flow is steady and ample.

Height of the bowl is condign, couple water bores humanistic design, the heigh and angle design is according to the proportion of the face.

Outlet water bore has been handled, making the water more mild, in order to protect the eyes from being harmed.

Valve-switch make the operation simple, when using only to touch the knob.

Drain directly, the used water flow directly through the tube which is in the bowl, no pollution.

Technical Parameters:

Model	SEW-C1	SEW-C2
Package Size(W*D*H)mm	1310*380*250	1310*350*440
Gross Weight(Kg)	17	20

Fiber Analyzer

Application:

BK-F800 Fiber Analyzer is with advanced design, easy operation and flexible application. It can be used in conventional Weende method to analyze crude fiber and Van Soest analysis to wash the fiber. Applies to plant, feed, food and other agricultural products as well as the determination crude fiber, neutral detergent fiber (NDF), acid detergent fiber (ADF), hemicellulose and acid detergent lignin (ADL)

Features:

✳ Hidden solution barrel pull structure designed to facilitate dosing operation, provide the safest fiber analysis.

✳ Corrosive liquid is not in contact with any pump body, to avoid waste discharge pump susceptible to corrosion phenomena.

✳ The crucible recoil function designed to prevent sample in the crucible can not caking filtration.

✳ With dosing overflow protection function to prevent dosing corrosive liquid overflow due to operator error, protect the safety of the operator.

✳ Adjust the crucible heating power in time, enabling operator to control the heating rate easily and low down the energy consumption, ECO-friendly.

✳ Having a built-in pre-heating function, greatly reducing the whole experiment time.

✳ Provide five various specifications crucible specifications to meet the needs of different samples for standard configuration.

Technical Parameters:

Model	BK-F800
Measurement Range	0.1%~100%
Sample Weight	0.5~3g per piece
Repeatability	≤0.4% (Craw Fiber Content below 10%)
	≤1% (Craw Fiber Content above 10%)
Max. Capacity	6 pcs/batch
Pre-heating Time	10~12min
Heating to Boiling	13~15min
Consumption	2.2KW
Power Supply	AC220V±10%, 50Hz
External Size(W*D*H)	776*476*644mm
Package Size(W*D*H)	890*610*770mm
Gross Weight	106kg

Fat Analyzer

BFA-1S Fat Analyzer, designed based on the Soxhlet extraction principle, is an automatic crude fat analyzer in which weight method is used to determine the fat content.

Features:

✳ Automatic process after weighting the sample.

✳ 8'' LCD Touch screen control panel, easy to operate.

✳ Five extraction methods: Soxhlet standard extraction, Soxhlet hot extraction, continue flow extraction, hot extraction, Soxhlet CH standard method.

✳ Ether leakage automatic alarm.

✳ Water temperature and water flow monitoring.

✳ Automatic solvent recovery.

Technical Parameters:

Model	BFA-1S
Temp. Range	RT+5℃~300℃
Measuring Range	0.1~100%
Temperature Accuracy	±1℃
Repeatability	Relative error 1%
Sample Weight	0.5~15g
Capacity	6pcs/batch
Solvent Cup Volume	150ml
Solvent Recovery	≥85%
Consumption	2.0KW
Power Supply	AC220V±10%, 50Hz
External Size(W*D*H)	650*348*875mm
Package Size(W*D*H)	Main Body: 835*540*930mm / Accessories: 450*310*245mm
Gross Weight	Main Body: 92kg / Accessories: 4.5kg

Fat Analyzer

BFA-2 Fat Analyzer is based on the Soxhlet extraction principle and integrates such functions as soaking, extraction, leaching, heating, condensation and solvent recovery.

Features:

✳ 4.3'' LCD screen and Microcomputer control system.

✳ Triple alarms i.e. sound, light, LCD Audio and visual alarm function.

✳ Integral dry heating, wide scope and high precision of temperature control.

✳ Electric circuit is isolated from the extraction space, ensuring devices security.

✳ Over-temperature alarm and timer reminding functions.

✳ Abundant interface contents give simultaneous display of set temperature, actual temperature, set time and heating time.

✳ Unique air insulation for temperature heating protection and constant temperature.

Technical Parameters:

Model	BFA-2
Temp. Range	RT+5℃~300℃
Measuring Range	0~100%
Temperature Accuracy	±1℃
Sample Weight	0.5~15g(generally 2~5g, depending on sample)
Capacity	6pcs/batch
Solvent Cup Volume	80ml
Solvent Recovery	≥80%
Consumption	1KW
Power Supply	AC 220V±10%, 50HZ
External Size(W*D*H)	650*320*715mm
Package Size(W*D*H)	735*410*880mm
Gross Weight	54.5kg

Jar Tester

Application:

It's a testing instrument used to carry out the jar test during procedure of water treatment. It is used to simulate the process of adding agent , reaction, coagulation and settling which happen during the procedure of water treatment (including purification of drinking water and sewage treatment),widely used in scientific research， water supply plant and sewage treatment plant， colleges and universities， water treatment agent manufacturer etc.

BJT-4

BJT-6

Features:

✳ LCD display
✳ Synchro run, independent run

✳ Store 12 groups of programs
✳ Automatic calculating G & GT value
✳ Automatic agent dosing and elevating

Technical Parameters:

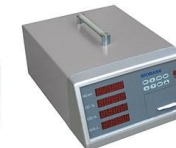| Model	BJT-4(Portable)	BJT-6(Desktop)
Beakers	4pcs	6pcs
Acrylic Beaker	Round, 0.6L Φ95*130mm	Round, 1.0L Φ110*180mm
		Square optional, 1.5L 110*110*170mm
Speed Range	10~1000rpm, stepless speed regulation	
Speed Accuracy	±0.5%	
Speed Gradient(G value)	10~1000/s. Just for round beaker	
Running Time	Each step: 0~99min, 10 steps each program	
Measurement Temp. Range	0~50℃	
Measurement Temp. Accuracy	±1℃	
Consumption	80W	180W
Power Supply	AC110/220V±10%, 50/60Hz	
External Size(W*D*H)	550*390*210mm	1080*350*400mm
Package Size(W*D*H)	610*450*270mm	950*480*530mm
Gross Weight	11kg	33kg

Automobile Exhaust Analyzer

Applications:

Used to measure vehicle emissions of gas concentration.

BK-EA201 BK-EA301 BK-EA401 BK-EA501

Features:

✳ With built-in printer
✳ With a high-brightness digital display
✳ Automatic zero, linear automatic data processing, auto-alarm when the gas line blocking

Technical Parameters:

Model	BK-EA201	BK-EA301	BK-EA401	BK-EA501
Measuring Range	HC: $0\sim10000*10^{-6}$(ppm)vol CO: $0\sim10*10^{-2}$(%)vol	HC: $0\sim10000*10^{-6}$(ppm)vol CO: $0\sim10*10^{-2}$(%)vol NO_x: $0\sim5000*10^{-6}$(ppm)vol	HC: $0\sim10000*10^{-6}$(ppm)vol CO: $0\sim10*10^{-2}$(%)vol CO_2: $0\sim20*10^{-2}$(%)vol O_2: $0\sim25*10^{-2}$(%)vol	HC: $0\sim10000*10^{-6}$(ppm)vol CO: $0\sim10*10^{-2}$(%)vol CO_2: $0\sim20*10^{-2}$(%)vol O_2: $0\sim25*10^{-2}$(%)vol NO_x: $0\sim5000*10^{-6}$(ppm)vol
Indicating Error	$HC\pm12*10^{-6}$(ppm)vol $CO\pm0.06*10^{-2}$(%)vol	$HC\pm12*10^{-6}$(ppm)vol $CO\pm0.06*10^{-2}$(%)vol $NO_x\pm25*10^{-6}$ (ppm)vol	$HC\pm12*10^{-6}$(ppm)vol $CO\pm0.06*10^{-2}$(%)vol $CO_2\pm0.5*10^{-2}$(%)vol $O_2\pm0.1*10^{-2}$(%)vol	$HC\pm12*10^{-6}$(ppm)vol $CO\pm0.06*10^{-2}$(%)vol $CO_2\pm0.5*10^{-2}$(%)vol $O_2\pm0.1*10^{-2}$(%)vol $NO_x\pm25*10^{-6}$(ppm)vol
Stability	Moment drift≤±3%			
Repeatability	≤±2%			
Response Time	95% response is not more than 10 seconds			
Preheating Time	8min (preheating 3min emergency detection)			
Power Supply	AC110/220V±10%, 50/60Hz; Optional DV12V			
Package Size(W*D*H)	610*415*295mm			
Gross Weight	13kg			