BioLAB

PRODUCT CATALOG

# KJELDAHL ANALYZER

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# KJELDAHL ANALYZER BGF1D1

## AUTOMATIC KJELDAHL NITROGEN PROTEIN ANALYZER

Automatic Kjeldahl Nitrogen Protein Analyzer is an automatic device integrating distillation and titration system and it is designed based on classic Kjeldahl nitrogen determination method.
It's equipped with the latest core control system, powerful automation and high-quality components; can easily achieve automatic cleaning of digestion tubes and titration cups, control steam supply and real-time detection of condensation temperature. High-accuracy charging pump and titration system ensure test results accuracy, and multiple fluid level detection gives a smooth test process.

Automatic cleaning ensures operator safety and saves time.
External titration cup design gives operator real-time control of the whole test process.
High-precision charging pump and titration ensure test results accuracy.
The temperature of distilled liquid is detected real time. If the temperature of distilled liquid is abnormal, to ensure the accuracy of the experiment's result, the instrument will stop working.
Easy Maintenance: Pre-install functions of cleaning, include receiving cup cleaning, alkali pipeline cleaning, boric acid pipeline cleaning, acid washing, steam bottle evacuation.
Support customers make routine maintenance easy.
High titration accuracy, up to 2.0μL/step.

## SPECIFICATIONS

| Model | BGF1D1 |
|---|---|
| Old Model | BKJS-203 |
| Measuring range | 0.1 mg ~ 240 mg N |
| Analysis time | 5 ~ 10 min/sample |
| RSD | ≤ 0.5% |
| Recovery | ≥ 99.5% |
| Burette precision | 2.0 μL/step |
| Sample capacity | solid ≤ 5 g/sample, liquid ≤ 20 mL/sample |
| Water consumption in the distillation process | 1.5 L/min |
| Data storage capacity | 1000 groups |
| Power supply | 220 VAC ±10%, 50/60 Hz |
| Power | 2000 W |
| Net weight | 38 kg |
| Dimensions | 455 mm x 391 mm x 730 mm |
| Alt Name | Automatic Kjeldahl Nitrogen Protein Analyzer |

## FEATURES

Automatic cleaning ensures operator safety and saves time.
External titration cup design gives operator real-time control of the whole test process.
High-precision charging pump and titration ensure test results accuracy.
The temperature of distilled liquid is detected real time. If the temperature of distilled liquid is abnormal, to ensure the accuracy of the experiment's result, the instrument will stop working.
Easy Maintenance: Pre-install functions of cleaning, include receiving cup cleaning, alkali pipeline cleaning, boric acid pipeline cleaning, acid washing, steam bottle evacuation.
Support customers make routine maintenance easy.
High titration accuracy, up to 2.0μL/step.
Integrated printer on the instruments.

## APPLICATIONS

Food

Tobacco

Feed

Environment

## KJELDAHL ANALYZER BGF1C1

AUTOMATIC KJELDAHL NITROGEN PROTEIN ANALYZER

Automatic Kjeldahl Nitrogen Protein Analyzer is an automatic device integrating distillation and titration system and it is designed based on classic Kjeldahl nitrogen determination method. It's equipped with the latest core control system, powerful automation and high-quality components; can easily achieve automatic waste discharge and cleaning of digestion tubes and titration cups, control steam supply and real-time detection of condensation temperature. High-accuracy charging pump and titration system ensure test results accuracy, and multiple fluid level detection gives a smooth test process.

Automatic distillation, titration, calculation, printing, drain and cleaning function, safety and saving-time.
Visible titration cup design gives operator real-time control of the whole test process.
Steam flow is controllable, satisfying different test requirements.
Regent barrel enjoys fluid absence warning function, ensuring smooth test going.
High-precision charging pump and titration system ensure test results accuracy.
The large LCD touch screen gives visual operation and abundant information, enabling the user to have a good command of it.
USB or RS485 interface is optional for PC connection. Distilled liquid temperature is detected real time. Emergency stop against temp anomaly.
Double distillation model meets different experiments, to retard the speed of ac

## SPECIFICATIONS

| Model | BGF1C1 |
|---|---|
| Old Model | BKJS-202 |
| Measuring range | 0.1 mg ~ 240 mg N |
| Analysis time | 3 ~ 8 min/sample |
| RSD | ≤ 0.5% |

| | |
|---|---|
| Recovery | ≥ 99.5% |
| Burette precision | 1.0 μL/step |
| Sample capacity | solid ≤ 5 g/sample, liquid ≤ 20 mL/sample |
| Water consumption in the distillation process | 1.5 L/min |
| Data storage capacity | 1800 groups |
| Power supply | 220 VAC ±10%, 50/60 Hz |
| Power | 2000 W |
| Net weight | 38 kg |
| Dimensions | 455 mm x 391 mm x 730 mm |
| Alt Name | Automatic Kjeldahl Nitrogen Protein Analyzer |

## FEATURES

Automatic distillation, titration, calculation, printing, drain and cleaning function, safety and saving-time.
Visible titration cup design gives operator real-time control of the whole test process.
Steam flow is controllable, satisfying different test requirements.
Regent barrel enjoys fluid absence warning function, ensuring smooth test going.
High-precision charging pump and titration system ensure test results accuracy.
The large LCD touch screen gives visual operation and abundant information, enabling the user to have a good command of it.
USB or RS485 interface is optional for PC connection. Distilled liquid temperature is detected real time. Emergency stop against temp anomaly.
Double distillation model meets different experiments, to retard the speed of acid-base reaction.
Digestion tube fast drain function is used to avoid operator touch distilled hot reagents,
protecting operators.
Printer is built in.
Complete microcomputer control: Automatic completion of distillation, titration, calculation,
printing, waste discharge and multiple protections,i.e.failure self-detection,hints of condensed water shortage, displacement of safety door and digestion tube and so on.
Large LCD Touch Screen Panel:5.6 inch LCD touch screen panel gives visual operation
and abundant information,enabling users to have a good command of it.
Complete compatible design
Compatible with congeneric products perfectly
Compatible with ϕ42mm digestion tube
Titration while distillation, enhances the efficiency rapidly.
User friendly design, color touch screen, easy for operating
Faster ARM system, faster operating rate.

## APPLICATIONS

Food

Tobacco

Feed

Environment

# KJELDAHL ANALYZER BGF1B1

AUTOMATIC KJELDAHL NITROGEN PROTEIN ANALYZER

Kjeldahl Nitrogen Protein Analyzer is unique in its intelligence, efficiency, energy saving and data sharing, bringing more new experiences to users.

Automation, Fully automatic distillation, titration, calculation, printing, waste disposal, fault
self-test and can be connected to 24-position Auto Sampler for true unattended operation,
making the whole experiment process simple and efficient.
Compliance with FDA 21 CFR Part 11 and GMP, it has the function of authorization management, account management,experiment data traceable password-aging and editing
protection,etc.
High accuracy, burette accuracy can be adjusted from 0.2 to 1μL/Step.
New metal condensing unit, ultra high efficiency for condensing,saving up to 50% water.

## SPECIFICATIONS

| Model | BGF1B1 |
|---|---|
| Old Model | BKJS-201 |
| Measuring range | 0.1 mg ~ 240 mg N |
| Analysis time | 3 ~ 8 min/sample |
| RSD | ≤ 0.5% |
| Recovery | ≥ 99.5% |
| Burette precision | 0.2 μL/step, 0.4 μL/step and 1.0 μL/step optional |
| Sample capacity | solids ≤ 5 g/sample, liquids ≤ 20 mL/sample |
| Water consumption in the distillation process | 0.5 L/min |
| Data storage capacity | 1 million groups (Internal) / Unlimited (PC) |
| Interface | USB, LAN, RS232, CAN, WIFI |
| Power supply | 220 VAC ±10%, 50/60 Hz |
| Power | 2000 W |
| Net weight | 38 kg |
| Dimensions | 460 mm x 360 mm x 725 mm |
| Alt Name | Automatic Kjeldahl Nitrogen Protein Analyzer |

## ACCESSORIES FOR PURCHASE

| No | Name | Description |
|---|---|---|

| | | |
|---|---|---|
| 1 | Auto Sampler | Capacity: 24 samples per batch<br>Rotor speed: ≥0.04 r/s<br>Sampling speed: ≥40 mm/s<br>Tank capacity: 4 x 15 L<br>Interface: CAN<br>Voltage: 24 V DC<br>Rated power: 40 W<br>Dimensions (L x W x H): 920 mm x 625 mm x 908 mm<br>Weight: 80 kg |

## FEATURES

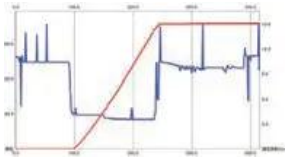
Automation, Fully automatic distillation, titration, calculation, printing, waste disposal, fault self-test and can be connected to 24-position Auto Sampler for true unattended operation, making the whole experiment process simple and efficient.

Compliance with FDA 21 CFR Part 11 and GMP, it has the function of authorization management, account management,experiment data traceable password-aging and editing protection,etc.

High accuracy, burette accuracy can be adjusted from 0.2 to 1μL/Step.

New metal condensing unit, ultra high efficiency for condensing,saving up to 50% water.

24-position Auto Sampler with fully program processing, no manual guard, saving human resource cost.



Distillation and titration in real time, variable speed titration technology, reducing experiment time up to 30%.

Specifications
With side-distillation titration and variable-speed titration technology, reducing experiment time by one-third
New Android operating system, easy to use, powerful, with 10 inch high-definition color touch screen, real-time control of the entire experimental process
With batch testing function, it makes the batch sample experiment operation simple, reducing test time
Monitoring the condensate effluent temperature in real time to ensure complete condensation of the sample, ensuring the test results are accurate and reliable
Privilege grading function, which can realize data traceability management and meet the requirements of GMP and 21CFR Part11
The titration module is used to titrate the receiving liquid, the titration result is more accurate, and the titration precision is higher.
The titration graph displays the online monitoring of the entire experimental process in real time, and the experimental method can be adjusted in real time to improve the test accuracy and efficiency.
Up to 24-position Auto Sampler, the Auto Sampler does not require a separate power supply and is directly connected to the fully automatic Kjeldahl analyzer. The entire system is more energy-efficient.
24-position injection port, the cleaning position is separated from the test position, completely eliminating the possibility of cross-contamination during distillation
Ultra-large capacity solvent tanks, which can meet 500 experimental analyses in one fill, effectively improve laboratory efficiency.

## APPLICATIONS

The product can be widely used in the fields of food processing, feed production, tobacco, animal husbandry, soil fertility, environmental monitoring, medicine, agriculture, scientific research, teaching, quality supervision and other fields of nitrogen or protein determination.

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