

JK9830A

Automatic Kjeldahl Analyzer

v24.4.20

The Kjeldahl method is a classic technique for determining nitrogen.

It is widely used for the measurement of nitrogen in soil, food, livestock, agricultural products, feed, and other nitrogen-containing compounds. The process for sample analysis using this method involves three main steps: sample digestion, distillation and separation, and titration analysis.

Our company is one of the creators of the national standard GB/T 33862-2017 for "Fully (Semi) Automated Kjeldahl Nitrogen Analyzer." Therefore, the Kjeldahl analyzer series products we develop and manufacture comply with both the GB standard and relevant international standards.



304 stainless steel steam generator

Offers reliable performance, high pressure resistance and a long service life.

Patented separated capacitive liquid level sensor

Offers reliable performance, high precision, and long service life.



Splash prevention bottle

Made of polymer material that is resistant to acids, alkalis, and high temperatures.



304 stainless steel condenser

Offers high cooling efficiency and long service life.

Product Features

One-button operation: Automatically completes reagent addition, temperature control, sample distillation, separation and recovery, automatic discharge of waste liquid from the digestion tube, and stops with a prompt after separation is complete.

Control system: 10-inch color touchscreen with easy English and Chinese language switching.

Dual-mode analysis: Supports both automatic and manual analysis.

Three-level authority management: Includes electronic records, electronic labels, and operation traceability query system that meets certification requirements.

Auto shutdown: Shuts down automatically after 60 minutes of inactivity, ensuring energy-saving and safety.

★ Automatic calculation: Inputs titration volume and automatically calculates, stores, displays, queries, and prints analysis results, offering partial functions of a fully automated system.

★ Built-in protein factor lookup table: Users can access, query, and integrate it into system calculations.

Distillation time: Freely adjustable from 10 to 9990 seconds.

Steam flow: Adjustable from 1% to 100% to accommodate different sample concentrations.

Automatic waste discharge: Waste liquid from the digestion tube is automatically discharged, reducing labor intensity for staff.

★ Automatic pipe cleaning: Alkaline tubing is automatically flushed during shutdown to prevent clogging and ensure precise liquid supply.

Data storage: (16M) Can store up to 1 million records for user reference.

5.7CM automatic thermal printer: Includes automatic paper cutting.

★ Anti-splash bottle: Made from high molecular PP plastic, suitable for high-temperature, strong alkaline, and strong acidic environments.

★ Steam system: Made from 304 stainless steel, with patented "separated capacitive liquid level sensor control" technology, ensuring system safety, reliability, and longevity.

★ Condenser: Made from 304 stainless steel for fast cooling and stable analytical data.

Leakage protection system: Ensures operator safety.

Safety door and alarm system: Ensures personal safety.

Digestion tube misalignment protection system: Prevents injury from reagents and steam.

Steam system low-water alarm: Prompts shutdown to prevent accidents.

Steam boiler over-temperature alarm: Shuts down to prevent accidents.

Steam overpressure alarm: Shuts down to prevent accidents.

Sample over-temperature alarm: Shuts down to prevent overheating of the sample, ensuring accurate analysis results.

Cooling water flow monitoring: Prevents sample loss and inaccurate analysis results due to insufficient water flow.

Technical Specification

Analysis range: 0.1–240 mg N

Precision (RSD): $\leq 0.5\%$

Recovery rate: 99–101%

Distillation time: Adjustable from 10 to 9990 seconds

Sample analysis time: 4–8 minutes (with cooling water temperature at 18°C)

Titration concentration range: 0.01–5 mol/L

Touchscreen: 10-inch color LCD touchscreen

Data storage capacity: Up to 1 million data sets

Printer: 5.7CM thermal printer with automatic paper cutting

Digestion tube waste discharge mode: Manual/Automatic discharge

Steam flow adjustment: 1%–100%

Safe alkali addition mode: 0–99 seconds

Automatic shutdown time: 60 minutes

Operating voltage: AC220V/50Hz

Heating power: 2000W

Main unit dimensions: Length: 500mm, Width: 460mm, Height: 710mm

Product Packing List

JK9830A main unit: 1 unit

5L reagent bottles: 2 units

10L distilled water bottle: 1 unit

20L waste liquid bottle: 1 unit

Reagent tubing: 4 pieces

Cooling water tubing: 2 pieces

Power cord: 1 piece

Digestion tube: 1 piece

Printer paper: 8 rolls