

# JK9830

## 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 automatic operation: completes reagent addition, temperature control, cooling water control, sample distillation and separation, data storage and display, and completion notification.

Control system: features a 7-inch color touchscreen, with English and Chinese language options for easy operation.

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

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

Auto shutdown: the system automatically shuts down after 60 minutes of inactivity, ensuring energy-saving, safety, and reliability.

★ Automatic result calculation: input the titration volume, and the system automatically calculates, stores, displays, queries, and prints the analysis results, providing partial functionalities of a fully automated product.

★ Built-in protein ratio lookup table: allows users to access and use it in system calculations.

Distillation time: adjustable from 10 seconds to 9990 seconds.

Data storage: can store up to 1 million records for user reference.

★ 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 liquid level control using patented "separated capacitive liquid level sensor control," ensuring system safety, reliability, and long service life.

★ Condenser: made from 304 stainless steel, providing 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 and shutdown: prevents accidents.

## 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)

Titrant concentration range: 0.01–5 mol/L

Touchscreen: 7-inch color LCD touchscreen

Data storage capacity: Up to 1 million data sets

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

JK9830 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