# **STALWART**

## Automatic Kjeldahl Nitrogen Protein Analyzer SAK-160



#### **Discription**

SAK-160 Kjeldahl Nitrogen Protein Analyzer is unique in its intelligence, efficiency, energy saving and data sharing, bringing more new experiences to users. 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.

#### **Features**

- Automation, Fully automatic distillation, titration, calculation, printing, waste disposal, fault self-test and can be
  paired with 24 positions 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.

## **Specification**

- 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, realtime control of the entire experimental process
- With batch testing function, it makes the batch sample experiment operation simple and simple, reducing test time
- Monitoring of the sample, ensuring the test results are accurate and reliable
- Privilege the condensate effluent temperature in real time to ensure complete condensation 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 positions autosampler, the SAK-124 autosampler does not require a separate power supply and is directly connected to the SAK-160 fully automatic Kjeldahl analyzer. The entire system is more energyefficient.
- 24-bit injection port, the cleaning position is separated from the test position, completely eliminating the possibility of cross-contamination during distillation
- Ultra-large capacity solvent tank, which can meet 500 experimental analysis in one fill, effectively improve laboratory efficiency
- Testing report can be customized and output by pdf or print.
- All sample weight weigh by balance can be output directly into K1160 for analysis(specified model).
- Color sensor can be adjust by RGB model, compliance with AOAC, ISO, EPA, USP etc.

## **Specification**

SAK-160 Automatic Kjeldahl Nitrogen Protein Analyzer	
Measuring range	0.1mg ~ 240mg N
Analysis time	3 ~ 8min/sample
RSD	≤5%
Recovery	≥99.5%
Burette volume	0.2μL/step, 0.4μL/step and 1.0μL/step optional
Sample capacity	solid≤5g/sample, liquid≤20mL/sample
Water consumption in the distillation process	0.5L/min
Data storage capacity	1 million groups
Interface	USB, LAN, RS232, CAN, WIFI
Power supply	220VAC±10%, 50Hz
Power	2Kw
Net weight	38Kg
Dimensions	460mm×360mm×725mm
SAK-124 Auto Sampler	
Capacity	24 samples per batch
Rotor speed	≥0.04r/s
Sampling speed	≥40mm/s
Tank capacity	4×15L
Interface	CAN
Voltage	24V DC
Rated Power	40W
Dimension(L×W×H)	920mm×625mm×908mm
Weight	80Kg

### **Benefits**

- 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%.