

2020
CATALOG

 **HAUROK**
POWER & EXPERTISE 





Haurok is an Orlando-based company providing high-performance laboratory equipment to a diverse range of applications in agriculture, food analyzing, feed production and scientific research as well as in industrial quality control. Our main goal is to empower our clients in coping with intricate analytical tasks so they can benefit from operational advantages, increased safety and time saving procedures. By acquiring our products and services, we want our clients to overcome their expectations and enjoy competitive advantage. We offer our Expertise to give you Power.





P O W E R & E X P E R T I S E



H-9840 K

Automatic Kjeldahl Nitrogen Analyzer

Haurok H-9840 K can perform sample distillation within minutes as well as automatic reagent quantification and tests. Its auto-cleaning processes for distillation and condensation takes measuring accuracy to a greater extent, making H-9840 K ideal for: a wide range of applications related to the measurement of nitrogen and protein; and tests of ammonium, volatile fatty acid – alkalinity; among other uses. H-9840 K also features a debug mode for checking whether the device is running properly, without malfunctions.

More accuracy

H-9840 K's dilution function prevents the overflow of ammonia caused by the reaction of digestive juice with concentrated alkali. Moreover, its



H-9840 K

unique rinsing function can fully absorb the residual ammonia in the pipeline to ensure the accuracy of your results.

Main features and advantages

- 4.3-inch high-resolution LCD

- Automated dosing of boric acid absorption solution

- Dilutions can be added automatically or manually, depending on the needs of the experiment

- The distillation time can be set

- Automatic leaching control system for higher measurement accuracy

- Flaw detection system

- Real-time temperature monitoring of the heating tube to ensure safe and reliable processes



H-9840 K

Technical Data

Measuring range	0.1 mg ~ 240mg nitrogen
Recovery rate	≥99.5%
Measuring sample capacity	Solid ≤6g; Liquid ≤16mL
Distillation speed	3 ~ 6min / sample
Distillation time	0 ~ 60min
Water consumption	1.5 L/min
Power supply	220 VAC ±10% 50Hz
Rated power	1.3 KW
Dimensions (length × width × height)	400mm × 385mm × 735mm
Net weight	30 Kg



P O W E R & E X P E R T I S E



H-9860 K

Automatic Kjeldahl Nitrogen Analyzer

H-9860 K Kjeldahl analyzer is a fully automatic device integrating distillation and titration functions. H-9860 K has a high-precision anti-corrosion dosing pump and a titration system to ensure the accuracy of experimental results. H-9860's high-precision titration system adopts the "end point" color judgment method to avoid frequent replacement and correction of the electrode.

Applications: agriculture, animal husbandry, environmental monitoring, feed, pharma, quality control, scientific research, soil and fertilizer, tobacco and other nitrogen/protein determination processes.

Efficient ARM system

Employing ARM processors H-9860 K's system is intuitively operated



H-9860 K

through a touch screen display. The equipment monitors and exhibits the experiment in real time. It also embeds everyday experimental detection methods and parameters.

Performance characteristics

Automatic functions: distillation, titration, result calculation, printing, cleansing and emptying

External titration cup for real-time control of the experiment

High-precision dosing pump and a reliable titration system to ensure the accuracy of results

5.6-inch color touch screen

Easy to operate



H-9860 K

Technical Data

Measuring range	0.1 mg ~ 240mg nitrogen
Recovery rate	≥99.5%
Measuring sample capacity	Solid ≤5g; Liquid ≤20mL
Analysis time	5 ~ 10min/sample
Titration accuracy	2.0μL/step
Data storage	1000 sets
Water consumption	1.5 L/min
Power supply	220 VAC ±10% 50Hz
Rated power	2 KW
Dimensions (length × width × height)	455mm × 391mm × 730mm
Net weight	38 Kg
Repeatability error (RSD)	≤0.5%



P O W E R & E X P E R T I S E



H-1100 K

Automatic Kjeldahl Nitrogen Analyzer

H-1100 K Kjeldahl analyzer is a fully automatic device integrating distillation and titration functions. H-1100 K can automatically clean its digestive tube and titration cup as well as easily complete the discharge of waste. You may also control H-1100 K's steam supply and check real-time temperature readings of the receiving liquid.

Applications: agriculture, animal husbandry, environmental monitoring, feed, food, pharma, quality control, scientific research, soil and fertilizer, tobacco and other nitrogen/protein determination processes.

Efficient ARM processor

Employing ARM processors H-1100 K's system is intuitively operated through a touch screen display. The equipment monitors and exhibits the



H-1100 K

experiment in real time. It also embeds everyday experimental detection methods and parameters.

H-1100 K – Automatic functions

Addition of alkali and acid; distillation; titration; waste discharge; cleansing; calibration; digestive tube emptying; flaw detection; solution level and temperature monitoring; and calculation of results.

Main features and advantages

Automatic functions: distillation, titration, result calculation, printing, cleansing, emptying, and solution level monitoring

External titration cup for real-time control of the experiment

Adjustable steam flow

When the temperature of the effluent is abnormal H-1100 K stops running to ensure the accuracy of the experiment results

Double distillation mode

High-precision dosing pump

Large LCD touch screen display

Φ42mm digestive tube

Easy to use

Faster ARM systems for faster computing



H-1100 K

(H-1100 K can be used with H-220 KDS/H-420 KDS/H-402 ES/H-03 GH)
* The nitrogen fixed tube version should be selected with its equivalent KDS series

Technical Data

Measuring range	0.1 mg ~ 240mg nitrogen
Recovery rate	≥99.5%
Measuring sample capacity	Solid ≤5g; Liquid ≤20mL
Analysis time	5 ~ 10min/sample
Titration accuracy	1.0μL/step
Data storage	1800 sets
Water consumption	1.5 L/min
Power supply	220 VAC ±10% 50Hz
Rated power	2 KW
Dimensions (length × width × height)	455mm × 391mm × 730mm
Net weight	38 Kg
Repeatability error (RSD)	≤0.5%



H-420 KDS

Graphite Digestion

H-420 KDS graphite digestion instrument uses infrared radiation heating technology and a single control platform. This device allows accurate temperature control, fast heating, and up to 500 sets of digestion procedures granting better control of the heating curve. H-420 KDS' exhaust gas absorption system can be set in different ways, from condensing to neutralizing the toxic gases produced while digesting.

Main features and advantages

Up to 20 samples can be digested simultaneously

Infrared radiation heating with graphite conduction base

Temperature accuracy: PID temperature controller, fast heating rate - only 25 minutes from room temperature to 400 ° C

H-420 KDS has two heating modes, curve and linear, and it allows up to 20 digestion programs;



H-420 KDS

H-420 KDS contains Teflon coating and the whole equipment receives an anti-corrosion treatment to avoid eventual damage caused by acidic liquid

5.6-inch LCD

Security system to preserve the equipment from overvoltage, overcurrent and overheating - it will automatically cut off the power when it reaches the limit temperature to ensure personal and property safety

H-420 KDS' digestive tube can be cooled quickly to improve work efficiency

Optional exhaust gas neutralization system to eliminate acid gases generated during the experiment

(S402 exhaust gas absorption system needs to be used with H-03 GH)

H-03 GH – Gas Collection Hood

Features

Snap-on PFA sealing cover that can be easily replaced

Non-electric water jet vacuum pump

Smart drip plate design to reduce the damage caused by acidic pollution





H-420 KDS

H-402 ES Exhaust Absorption System

The neutralization system has excellent neutralization and adsorption, and it is also capable of neutralizing acid mist and reaction gases generated in Kjeldahl analysis or other processes. H-402 ES is designed to increase the gas/liquid contact area and neutralize the acidic gas.

Features

Semi-transparent neutralization unit designed for easy observation and easy replacement

Real time adjustment of negative pressure to avoid gas spillage and evacuation

Its anticorrosion vacuum pump guarantees substantial suction and efficient gas emission reduction

H-402 ES possesses a ternary filtration system (water condensation, alkali neutralization and active carbon filtration) which optimally ensures both neutralization and absorption performance



H-420 KDS

Technical Data

Temperature control range	Room temperature +5 ° C ~ 450 ° C
Temperature control accuracy	±1°C
Heating method	Infrared with graphite conduction base
Insulation method	Air duct insulation technology
Digestive flask capacity	300mL
Power supply	220 VAC ±10% 50Hz
Rated power	3.6 KW
Dimensions (length × width × height)	515mm × 458mm × 730mm
Net weight	40Kg
Digesting capacity	20pcs/batch



H-406 SOX

Soxhlet Extractor (Fat Analyzer)

Allowing 6 sample tests at the same time, H-406 SOX integrates functions such as condensation, extraction, heating, leaching, soaking and solvent recovery in a top-notch device with automatic temperature control, which ensures uniform heating. Optimal temperature can be selected for quick analyses accordingly to the difference between the reagent boiling point and the room temperature. H-406 SOX also provides quick and efficient separation of a substance from solid or semi-solid samples and can determine the soluble organic compounds present in detergent, feeds, foods, fiber-made items, medicines, plastics, petrochemical products, polymers, rubber, sludge, soil, etc. At last, H-406 SOX allows recycling reagents, which makes tests cost-efficient, and by it soaking, extraction and solvent recovery can all be executed in one step, saving time and effort.



H-406 SOX

Performance characteristics

- Light and text pop-up
- Temperature and time can be set accordingly
- Easy lifting
- User friendly interface
- Heat insulation and heat preservation
- 4.3" LCD

Technical Data

Measuring range	0 to 100%
Temperature control range	Room temperature +5 ° C ~ 280 ° C
Measurement time	20~80% shorter than traditional methods
Temperature control accuracy	±1 ° C
Measuring sample weight	0.5g ~ 15g (constant 2g ~ 5g)
Processing capacity	6/batch
Heating cup volume	80mL
Power supply	220 VAC ±10% 50Hz
Rated power	1 KW
Dimensions (length × width × height)	650mm × 320mm × 715mm
Net weight	35Kg
Solvent recovery	≥80%



H-606 SOX

Soxhlet Extractor (Fat Analyzer)

Featuring 5 extraction methods to meet different purposes, H-606 SOX applies the Soxhlet extraction principle and weight method to find out fat content. Containing a whole metal heating module, it provides a fast and effective temperature increase at a low power consumption, water temperature and flow control, and an ether leak detection system to guarantee the safety of experiments. H-606 SOX is recommended for soluble organic compound extraction and, thereby, can be used in a diverse range of processes, such as agricultural, food and environmental analyses.

Applications: widely used in agriculture, food, environment analysis and industry. It is an ideal instrument for the determination of fat in food, oil, feed and other industries; it can also be applied to the extraction of soluble organic compounds in drugs, soil, sludge, detergents and other substances.



H-606 SOX

Main features and advantages

All organic solvents can be used, including benzenes, ethers, ketones, etc.

Fully automatic Soxhlet extraction

Start and pause in one button

Android-style interface

Five extraction methods

You can repeat your experiment through a single button

Water flow control and temperature monitoring

It keeps track of condensate water, ensuring no leakage

Solvent recovery system

Universal Instrument (All Solvents)

H-606 SOX's solvent gasket can withstand all kinds of organic reagents while ensuring a safe sealing.



H-606 SOX

Technical Data

Measuring range	0.1% to 100%
Temperature control range	Room temperature +5 ° C ~ 300 ° C
Measurement time	20~80% shorter than traditional methods
Temperature control accuracy	±1°C
Measuring sample weight	0.5g ~ 15g
Processing capacity	6/batch
Flask volume	80mL
Power supply	220VAC ±10% 50Hz
Rated power	1 KW
Dimensions (length × width × height)	650mm × 320mm × 715mm
Net weight	35Kg
Repeatability error	1%
Solvent recovery	≥85%



P O W E R & E X P E R T I S E



H-420 MP | H-430 MP

VIDEO MELTING POINT

H-450 MP | H-470 MP | H-490 MP

AUTOMATIC VIDEO MELTING POINT

H-420 MP and H-430 MP video melting point, and also H-450 MP, H-470 MP and H-490 MP automatic video melting point, incorporate image detection and video shooting technology into the melting point measurement, not only providing users with stable and reliable melting point test functions, but also clearly and intuitively displaying the changing process of samples. HAUOK's melting point apparatuses are thought to resist external environmental interference, ensure stability and accuracy, featuring fast heating and cooling to reduce awaiting time.



POWER & EXPERTISE



H-420 MP | H-430 MP

H-450 MP | H-470 MP

H-490 MP

Applications: these instruments can be widely used in the chemical industry, medical research and the production of drugs, perfumes, dyes and other crystalline organic substances.

Simultaneous determination of four samples

4 sets of data are recorded separately to trace the historical data, complying with FDA 21CFR11.

Multi-user hierarchical management

Built-in user management function, you can freely add and delete user accounts, and you can set different user profiles.

Large LCD touch screen

Equipped with Android operating system, the interface is easy to understand and operate.

Exporting data is easy

You can connect your apparatus directly to a printer and use an SD card to export video data.

Haurok's melting point apparatuses offer you up to 128G for storing your methods and results.



H-420 MP | H-430 MP
H-450 MP | H-470 MP
H-490 MP

Main features and advantages

Fully automatic video melting point instrument with Android operating system

8-inch high-definition large capacitive touch screen

720P HD camera, 8x optical magnification, sample detail magnification, sample detail changes are clearly visible

Linear heating rate from 0.10 ° C to 20.00 ° C infinitely adjustable

Store methods, historical measurement data, videos and maps

Connect to a USB printer, thermal printer or USB flash drive to export reports

Built-in Wifi for wireless connection to your network, being able to use cloud service features

Meets pharmacopoeia GLP requirements

It complies with FDA 21CFR11 and has functions such as audit trail, electronic signature, data tamper-proof output, user hierarchical management, and free assignment of authority

Certified by TART



POWER & EXPERTISE



H-420 MP | H-430 MP

H-450 MP | H-470 MP | H-490 MP

Technical Data

	H-420 MP	H-430 MP	H-450 MP	H-470 MP	H-490 MP
Temperature range	RT ~300°C	RT ~350°C	RT ~350°C	RT ~400°C	RT ~400°C
Temperature resolution	0.1°C	0.1°C	0.1°C	0.1°C	0.01°C
Repeatability	-----	0.2°C	(heating rate: 0.20°C/min)	-----	-----
Accuracy	-----	±0.4°C	(<200°C)	±0.7°C (<300°C)	-----
Heating rate	-----	-----	0.1°C ~ 20°C	-----	-----
Display	-----	-----	8"capacitive touch screen	-----	-----
Ports	-----	-----	USB×3, RS232, Wi-Fi, RJ45	-----	-----
Magnification of lens	-----	-----	8 times	-----	-----
Processing capacity	-----	-----	4 per batch	-----	-----
Storage	doesn't apply	doesn't apply	100 sets	200 sets	500 sets
Data storage	8G	16G	16G	32G	128G
Method storage	doesn't apply	30 sets	30 sets	80 sets	200 sets
Net weight	3.3Kg	3.3Kg	3.4Kg	3.4Kg	3.4Kg
Automatic measurement	doesn't apply	doesn't apply	yes	yes	yes
Video playback	doesn't apply	yes	yes	yes	yes
FDA21 CFR part II	doesn't apply	compliant	doesn't apply	compliant	compliant
Audit trail	doesn't apply	yes	doesn't apply	yes	yes



H-SD1.8L Spray Dryer

Haurok's SD1.8L provides an efficient way for producing dry powder from your sample. H-SD1.8L has a PID control allowing the versatility you need when drying different thermally sensitive material.

Technical Data

Maximum water evaporation	1800ml/h
Inlet air temperature	30~250°C ± 1°C
Dry air flow	70m ³ /h (maximum 600m ³ /h, pressure 1000Pa)
Electric heater	3.0kw/220v, 3000
Spray system	0.7mm caliber two- fluid spray nozzle
Automatic plugging device	Automatic needle frequency is adjustable, 0 ~ 60s/t
Software version	HS- Control 1.0, visual touch operation
Power Supply	220 VAC ±10% 50 ~60 Hz
Net Weight	58kg
Feed Volume	Peristaltic pump delivery: 0 ~ 2000ml/h
Outlet air temperature	30~ 120°C ± 1°C
Inlet and outlet air temperature monitoring	0.2kw/220w/frequency control
Average drying time	1.0 ~ 1.5s
Control system	Siemens PLC control system
Rated power	3.6KW
Dimensions (length × width × height)	470mm × 570mm × 922mm



H-5718ULT

H-5718ULT series ultra-low refrigerated circulators

In order to ensure continuous reliable operations, H-518ULT series feature a unique stepper valve, hot gas by-passing and temperature control; so that you can keep your system temperature stability up to ± 0.1 °C.

Quieter for a better work environment

For a quieter environment and consistent productivity this series features a magnetic pump to reduce noise without losing circulating power.

Main features

- Dynamic temperature control for stability up to ± 0.1 °C

- Available with cooling capacity for 400 W, 800 W, 1200 W, 1600 W and 2000 W

- Magnetic pump for quiet and powerful circulation



H-5718ULT series

Technical Data

Models	H-5718ULT- E1600-R80	H-5718ULT- E2500-R80	H-5718ULT- E3500-R80
Temperature range at 20 °C	-80 ~ +40	-80 ~ +40	-80 ~ +40
Temperature fluctuation \pm °C	0.2 ~ 0.5	0.2 ~ 0.5	0.2 ~ 0.5
Cooling capacity at 20°CW	1600	2500	3500
Max pump pressure (bar)	1.4	1.4	1.4
Max pump flow-rate (L/min)	25	25	25
Volume	5 ~10 L	5 ~10 L	5 ~10 L
Dimensions (length × width × height) mm	500×780×1000	500×980×1000	600×1180×1200



P O W E R & E X P E R T I S E

H-5718RC

H-5718RC series recirculating coolers (chillers)

In order to ensure continuous reliable operations, H-5718RC series feature a unique stepper valve, hot gas by-passing and temperature control; so that you can keep your system temperature stability up to ± 0.1 °C.

Quieter for a better work environment

For a quieter environment and consistent productivity this series features a magnetic pump to reduce noise without losing circulating power.

Main features

Dynamic temperature control for stability up to ± 0.1 °C

Available with cooling capacity for 400 W, 800 W, 1200 W, 1600 W and 2000 W

Magnetic pump for quiet and powerful circulation



H-5718RC series

Technical Data

Models	H-5718RC-E400	H-5718RC-E800	H-5718RC-E1200L/H
Temperature range at 20 °C	-10 ~ +40	-10 ~ +40	-10 ~ +40
Temperature fluctuation \pm °C	0.2 ~ 0.5	0.2 ~ 0.5	0.2 ~ 0.5
Cooling capacity at 20°CW	400	800	1200
Max pump pressure (bar)	0.7	0.7	1.4/4.0
Max pump flow-rate (L/min)	12	12	25/20
Volume	3 ~5 L	3 ~5 L	3 ~5 L
Dimensions (length × width × height) mm	245×425×525	325×525×615	460×550×800



H-5718RC series

Models	H-5718RC- E2500H	H-5718RC- E3000L	H-5718RC- E5000H
Temperature range at 20 °C	-10 ~ +40	-10 ~ +40	-10 ~ +40
Temperature fluctuation ±°C	0.2 ~ 0.5	0.2 ~ 0.5	0.2 ~ 0.5
Cooling capacity at 20°CW	2500	3000	5000
Max pump flow-rate (L/min)	20	25	20
Volume	3 ~5 L	3 ~5 L	3 ~5 L
Dimensions (length × width × height) mm	500×780×1000	500×980×1000	600×980×1200



H-5718RC series

Models	H-5718RC- E10000H	H-5718RC- E12000L	H-5718DT- IPG1000b)	
Temperature range at 20 °C	-10 ~ +40	-10 ~ +40	-10 ~ +40	
Temperature fluctuation ±°C	0.2 ~ 0.5	0.2 ~ 0.5	0.2 ~ 0.5	
Cooling capacity at 20°CW	1000	12000	3500	1000
Max pump pressure (bar)	4.5	1.8	3.5	
Max pump flow-rate (L/min)	35	40	20	10
Volume	5 ~10 L	5 ~10 L	5 ~10 L	
Dimensions (length × width × height) mm	600×1180×1200	600×1180×1200	600×980×1200	



P O W E R & E X P E R T I S E

H-5718LT

H-5718LT series ultra-low refrigerated circulators

In order to ensure continuous reliable operations, H-518LT series feature a unique stepper valve, hot gas by-passing and temperature control; so that you can keep your system temperature stability up to ± 0.1 °C.

Quieter for a better work environment

For a quieter environment and consistent productivity this series features a magnetic pump to reduce noise without losing circulating power.

Main features

Dynamic temperature control for stability up to ± 0.1 °C

Available with cooling capacity for 400 W, 800 W, 1200 W, 1600 W and 2000 W

Magnetic pump for quiet and powerful circulation

H-5718ULT series



P O W E R & E X P E R T I S E

Technical Data

Models	H-5718LT- E1200-R40	H-5718LT- E2000-R40	H-5718LT- E3000-R40	H-5718LT- E5000-R40
Temperature range at 20 °C	-40 ~ +40	-40 ~ +40	-40 ~ +40	-40 ~ +40
Temperature fluctuation ±°C	0.2 ~ 0.5	0.2 ~ 0.5	0.2 ~ 0.5	0.2 ~ 0.5
Cooling capacity at 20°CW	1200	2000	3000	5000
Max pump pressure (bar)	1.4	1.4	1.4	1.4
Max pump flow-rate (L/min)	25	25	25	25
Volume	5 ~10 L	5 ~10 L	5 ~10 L	5 ~10 L
Dimensions (length × width × height) mm	400×600×825	500×780×1000	400×600×825	500×780×1000
