Nitrogen Evaporator / Sample Concentrator (Heating Block Types)

NEC160 series Nitrogen Evaporator / Sample concentrator is a high precision temperature control instrument with microprocessor controlled and PID fuzzy controlled technique. It works by blowing nitrogen in the surface of sample which is being heated to accelerate evaporating and separating the solvent in the samples without oxygen. Instead of rotary evaporation instrument, nitrogen sample concentrator can efficiently concentrate a large of samples simultaneously.

Features

- High precision and wide range of temp control.
- Blowing a large number of samples at one time.
- Blowing each sample independently.
- Easy operation; safe and reliable to use.





Sample Concentrator Block



Standard LCD Display



Touch Screen HMI

Model	NEC160-A24	NEC160-A48	NEC160-A96
Temp. range	RT+5°C -160°C		
Temp. accuracy	±0.5°C(@40°C)		
Temp. accuracy	±1°C(@120°C)		
Temp. uniformity	±0.5°C		
Display	LCD Display, size 72x72 mm (Standard supply) **Optional:** Touch Screen HMI with USB, Ethernet, RS485, Wifi, Real Time Data Storage Memory, 3 Level Password Protected User Management, Log Functions (Audit Trail, Alarms), Graph View, PC Connection, RS485 Protocol, Fixed point or Programmable multipoint calibration facility, Offset correction, Non editable PDF or csv data export etc.		
Display accuracy	0.1°C		
Time Range	1-99h59min/∞		
Heating time	≤15min (25°C to 160°C)		
Max. vertical travel	150mm		
Max. gas usage	15L/min		
Max. gas pressure	0.05Mpa		
Block qty	1		
Max. power	500W	1000W	1500W
Electricity	220V or 110V 50/60Hz		
External dimensions	W310*D220*H385 (mm)		
Net weight	7.5kg		

Custom size available

Nitrogen Evaporator / Sample Concentrator (Heating Water Bath Types)

Introduction: The sample concentrator employs a sweeping needle capture technique, which allows for simultaneous temperature-controlled heating of the samples. Utilizing inert gases such as nitrogen, it rapidly, controllably, and continuously blows onto the sample surface, achieving rapid anaerobic concentration of the sample volume. This method is characterized by its time-saving, convenient, and precise nature and is extensively applied in fields such as pesticide residue analysis, pharmaceutical testing, environmental analysis, bio-analysis, commodity inspection, and food and beverage testing.

Features

- The distribution chamber's gas channels can be combined or used individually, with independent control for each. The height of the distribution chamber can be adjusted as needed.
- Individual gas flow adjustment for each channel, addressing the issue of inconsistent flow rates in traditional nitrogen blowers, and featuring a flexible self-balancing lifting system.
- Digital temperature controller with dual digital display, using PID technology for regulation and capable of high-temperature alarm.
- All solvent-contact parts are made of 304stainless steel for durability and ease of cleaning.
- The entire unit can be used inside a fume hood.
- Optional gas flow meters and pressure regulators are available for each model.
- Standard test tube rack is φ16.5mm; the hole diameter and arrangement pattern are customizable.





Standard LCD Display



Touch Screen HMI

Technical Parameters

Model	SC12	SC24	SC36	SC48
Heating Method	Water bath			
Max Number of Samples	12	24	36	48
Temp. Control Range	RT~100℃			
Temp. Accuracy	±1℃			
Heating Time	20~25min(From 25℃ to 100℃)			
Max Gas Usage	15L/min			
Consumption	600W			
Timing Range	1~999min			
Needle Length	150mm			
Needle Diameter	1mm			
Power Supply	220V, 50/60Hz			
External Size(W*D*H)	340*200*460mm			
Packing Size(W*D*H)	500*280*410mm			
Net Weight	7kg	7.5kg	7.5kg	8kg
Gross Weight	9kg	9.5kg	9.5kg	10kg

Custom size available

Nitrogen Evaporator / Sample Concentrator (Closed Water Bath Types)

Introduction: The sample concentrator employs a sweeping needle capture technique, which allows for simultaneous temperature-controlled heating of the samples. Utilizing inert gases such as nitrogen, it rapidly, controllably, and continuously blows onto the sample surface, achieving rapid anaerobic concentration of the sample volume. This method is characterized by its time-saving, convenient, and precise nature and is extensively applied in fields such as pesticide residue analysis, pharmaceutical testing, environmental analysis, bio-analysis, commodity inspection, and food and beverage testing.

Features

- The distribution chamber's gas channels can be combined or used individually, with independent control for each. The height of the distribution chamber can be adjusted as needed.
- Individual gas flow adjustment for each channel, addressing the issue of inconsistent flow rates in traditional nitrogen blowers, and featuring a flexible self-balancing lifting system.
- Digital temperature controller with dual digital display, using PID technology for regulation and capable of high-temperature alarm.
- All solvent-contact parts are made of 304stainless steel for durability and ease of cleaning.
- The entire unit can be used inside a fume hood.
- Optional gas flow meters and pressure regulators are available for each model.
- Standard test tube rack is φ16.5mm; the hole diameter and arrangement pattern are customizable.





Standard LCD Display



Touch Screen HMI (Optional)

Model	LVSC-12	LVSC-24	LVSC-36	LVSC-50	LVSC-60
Number of samples	12	24	36	50	60
Blow manifold	2x6 samples	3x8 samples	4x9 samples	5x10 samples	6x10 samples
Air pressure adjustment	0-0.8MPA				
Air pressure operation method	Independent control				
Air pressure adjustment gauge	Yes				
Sample Tray	Replaceable				
Built in Exhaust Fan Systems	Yes				
Heating mode	Water bath heating with closed lid system				
Temperature range	Room temperature+5 to 100°C				
Temperature control accuracy	±0.5°C				
Temperature control	Microprocessor fuzzy PID				
Display Temperature	LCD				
Over and under temperature alarm	Yes				
Visual surface	No				
Timing function	Yes				
Timing range	0-9999 min/hour/continuous				
Double sealing door system	Yes				
Power supply	220V 50HZ				
Weight	15kg	18kg	20kg	28kg	32kg

Custom size available