



Athena
Technology

One Stop Laboratory Solution...

Nitrogen Evaporator



Sample Evaporation & Concentration



Nitrogen Evaporator

50 Sample Concentrator / Evaporator

Nitrogen Evaporator Model: **AT-EV-50** is a Precision Sample Concentrator by Nitrogen Purging. It is a newly designed Sample Concentrator for multiple sample pre-concentration of in organic media. A Table Top Model. The unit can be set to a constant Flow and constant Temperature to ensure good evaporation.

It is fully microprocessor controlled and water bath, Temperature, gas station, more advantage LCD display, over Temp. Heater ON/OFF LED, door open display, high temperature Thermal cutoff for safety for best quality and best performs.

Athena offer a range of Nitrogen Evaporator Concentration Workstations for sample evaporation. This guide is designed to help you select the most suitable Nitrogen Evaporator for your research requirements. All Nitrogen Evaporator use a vortex evaporation technology that increases the speed of evaporation by a factor of 10 compared to other techniques. The combination of gas flow and temperature is then used to optimise the sample drying. Nitrogen is recommended as the best choice for the gas because it is inert and minimises the risk of oxidation.

As gas usage can be high if large numbers of samples are prepared a Nitrogen generator or bulk liquid nitrogen supply is recommended to minimise cylinder handling.

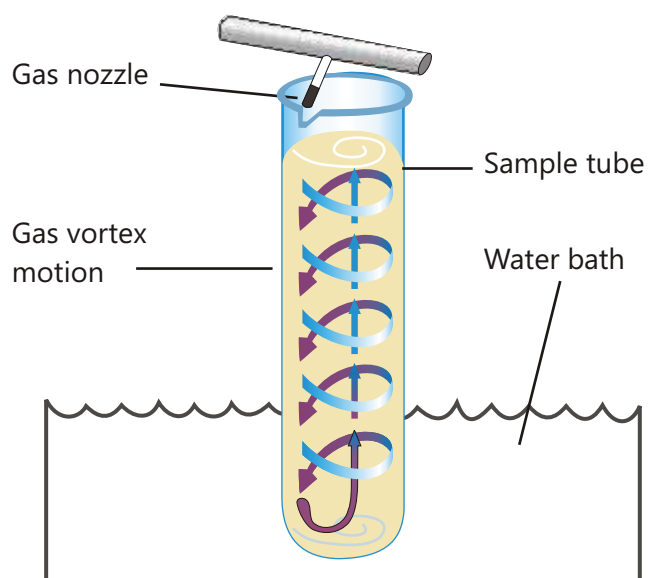


ATHENA Special Features of AT-EV-50 / 08 / 24 / 100:

- Compact Size Table top Model.
- Precise manufacturing using latest technology -Water Jet Cutting & CNC fabrication
- High Quality Pressure Gauge from Wika.
- Side Handles for easy movement
- SS 316 tank & Nozzle Manifold for durability and maintenance free
- Best Quality powder coating for great looks & to avoid rusting
- Silicon Heater with SS316 Water bath Tank system
- Specially Designed for fast & uniform heating
- Tank & Body gap is well insulated with imported Glass wool Sheet to avoid heat loss.
- Digital LCD Display
- Auto Cut off with precision sensor for Time, temperature & gas flow
- Best quality Pneumatic Fitting from Janatics& Parker operation
- Efficient & adjustable ventilation with Built-in exhaust fan with blower
- 2mtr 1.5" ID Polyethylene Exhaust hose for easy ventilation
- 5 Nitrogen Control valves with ON/OFF Switches
- 50 nitrogen -dispensing nozzle in five horizontal rows
- Self glowing Power ON /OFF Switch
- Automated Solvent Drying, Solvent Evaporation and Sample Concentration
- Evaporation Medium : Nitrogen Gas
- Fast evaporation
- Microprocessor-controlled vortex motion increases surface area for faster evaporation.
- Maintenance-free, microprocessor-controlled motor provides smooth variable-speed power to drive the vortex motion.
- Audible alarm with automatic shut down for timed end point

Product Specifications:

- Vortex Shearing Concentration
- Time Range: 15 sec to 10 hours
- Time Set-up / down arrow keys (15 sec increments)
- Temperature range: Ambient to 99 °C
- Temperature set-up / down arrow keys (1 °C increment)
- Start/stop: Green LED indication when process is On
- Gas stations: 5 Nos. with LED indication
- Gas regulator range: 0 to 100 PSI (approx)
- Pressure gauge range: 0 to 100 PSI
- Controlled: Fully Microprocessor based
- Sample capacity: 50 Nos.
- Gas Line: 5 Nos.
- Dimensions: 30cm(H) x 40cm(W) x 55cm(L)
- Weight: 20 Kgs
- Power supply: 230 V AC / 3Amp 50 Hzs
- Error indication: LED indication with Buzzer
- Easy ON/OFF switches to turn Nitrogen Flow on or off to the nozzle above the sample vials



Nitrogen Evaporator

24 Samples (I-Chem Vial -40ml & 60ml Tube Vials)



Nitrogen Evaporator Model: **AT-EV-24** is a Precision Sample Concentrator by Nitrogen Purging. It is a newly designed Sample Concentrator for multiple sample pre-concentration of in organic media for Vortex Motion Concentration and ASE (Dionex) Compatible upgrade Kit (For I-Chem vial 40mL, 60mL). A Table Top Model. The unit can be set to a constant Flow and constant Temperature to ensure good evaporation.

It is fully microprocessor controlled and water bath, Temperature, gas station, more advantage LCD display, over Temp. Heater ON/OFF LED, door open display, high temperature Thermal cutoff for safety for best quality and best performs.

The Nitrogen Evaporator concentrates organic solvent extracts using steam and nitrogen. This set-up is ideal for environmental analysis. The vortex shearing action provides rinsing as the sample concentrates to maximize recoveries. The 24 position standard internal rack in the Nitrogen Evaporator for 40 & 60ml tube. For volumes greater than 30 mL, an ASE compatible version of Nitrogen Evaporator is available for use in conjunction with Dionex ASE 200 columns.

Product Specifications:

- Sample capacity : 24 Nos. (AT-EV-24)
- Gas stations : 3 Nos. with LED indication
- Sample Capacity : 40ml & 60 ml Test Vials
- Vortex Shearing Concentration
- Time Range: 15 sec to 10 hours
- Time Set-up / down arrow keys (15 sec increments)
- Temperature range: Ambient to 95°C (thermal cutout)
- Temperature set-up / down arrow keys (1°C increment)
- Start/stop: Green LED indication when process is ON
- Gas stations: 5 Nos. with LED indication
- Display: LCD Digital
- Controlled: Fully Microprocessor based
- Sample capacity: 24 Nos. (AT-EV-24)
- Gas Line: 3 Nos

Applications

- Pharmaceutical biotech compounds
- Clinical samples
- Environmental samples
- Petrochemicals
- Forensic and crime samples
- Drugs of abuse samples
- Food and beverage analysis
- Agrochemical samples

Nitrogen Evaporator

8 Samples High Volume



Nitrogen Evaporator Model: High volume **AT-EV-08** is a Precision Sample Concentrator by Nitrogen Purging. It is a newly designed Sample Concentrator for multiple sample pre-concentration of in organic media. A Table Top Model. The unit can be set to a constant Flow and constant Temperature to ensure good evaporation.

It is fully microprocessor controlled and water bath, Temperature, gas station, more advantage LCD display, over Temp. Heater ON/OFF LED, door open display, high temperature Thermal cutoff for safety for best quality and best performs. In our High Volume with 8 sample Evaporation System efficiently concentrates samples prior to analysis by LC/MS or other analytical instruments. Turbo Evaporator is suitable for evaporation of large volumes after liquid-liquid extractions.

Product Specifications:

- Time Range : 15 sec to 10 hours
- Time Set-up / down arrow keys (15 sec increments)
- Temperature range : Ambient to 95 °C (thermal cutout)
- Temperature set-up / down arrow keys (1°C increment)
- Start/stop : Green LED indication when process is ON
- Display : LCD Digital
- Gas stations : 2 Nos. with LED indication (AT-EV-08)
- Gas regulator range : 0 to 100 PSI (approximate)
- Pressure gauge range : 0 to 100 PSI
- Controlled : Fully Microprocessor based
- Sample capacity : 8 Nos samples (Beaker)
- Gas Line : 2 Nos
- Colour : Athena Blue /Green
- Exhaust: 1/2" Hose Pipe of 1 mtr. length

Technical Specifications:

- Space requirements : Table top or fume hood with minimum dimension L, W & H (cms) 70 x 50 x 65 table weight capacity 35 kg minimum requirement
- Work area : Flat, level, stable, surface
- Power supply : 230 AC/5amp single phase stable & well grounded
- Gas supply : Laboratory grade nitrogen
- Inlet pressure : 60 PSI minimum, 100 PSI maximum (And ON/OFF control valve)
- Exhaust: Exhaust duct outlet or fume hood - the exhaust duct must go to outside the lab.
- Water bath capacity : 6.5 Ltr. distilled water (6.5 Ltr. do not over flow)

Accessories



Rack size for AT-EV-50

Rack Type	Working volumes	Type Of Test Tube
12mm x 40mm	2 ml	Eppendorf
12mm x 75mm	0.4 ml	Round Surface
12mm x 100mm	0.5 ml	Round Surface
16mm x 100mm	10 ml	Round Surface
15mm x 125mm	11 ml	Round Surface
15mm x 150mm	12 ml	Round Surface
17mm x 125mm	15 ml	Conical
17mm x 150mm	16 ml	Round Surface
18mm x 150mm	20 ml	Round Surface
20mm x 150mm	30 ml	Round Surface

Rack size for AT-EV-24

Rack Type	Working volumes	Type Of Test Tube
28mm x 95mm	40 ml	Round Surface
28mm x 140mm	60 ml	Round Surface

Rack size for AT-EV-08

Rack Type	Working volumes	Type Of Beaker
50 x 70mm 100ml	80ml	1ml with End Point Stem
60 x 80mm 150ml	120ml	1ml with End Point Stem
70 x 95mm 200ml	200ml	1ml with End Point Stem

Griffin Low Form, with Spout Beaker also available

Rack size for AT-EV-100

Rack Type	Working volumes	Type Of Test Tube
12mm x 75mm	0.4 ml	Round Surface
12mm x 100mm	0.5 ml	Round Surface
10mm x 40mm	0.2 ml	Eppendorf
16mm x 100mm	10 ml	Round Surface
15mm x 125mm	11 ml	Round Surface
15mm x 150mm	12 ml	Round Surface

Accessories

- One rack will be supplied with Nitrogen Evaporator
- Standard Fittings, Exhaust Hose Pipe, PU Fittings & Tubing, Clamps & Power Cord
- Nozzle Cap 50 Nos. supplied
- Operational Manual, IQ/OQ/PQ & CE Certificate will be provided

**We can also supply
NITROGEN GAS GENERATOR for Evaporator**

Pharma & CRO



Foods & Sea Food Fishries



International Client



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