Array Rotary Evaporator

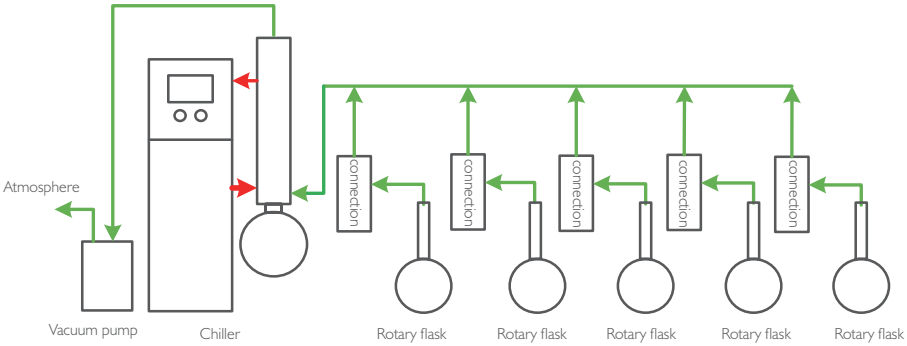
Green | Safety | Intelligent | Efficient

Focusing on sample processing and
Laboratory environment improvement

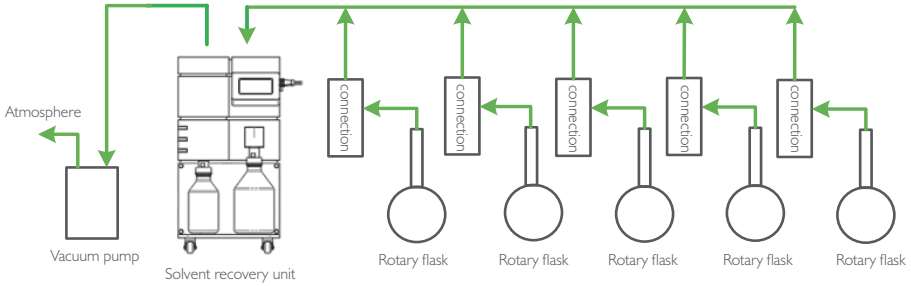
Array Rotary Evaporator

Array rotary evaporator is an innovative pre-treatment device that can concentrate multi-sample at same time. It is composed of Multiple miniRotar unit, Vacuum System and Solvent Collector unit, which can greatly save the space and improve the experiment efficiency.

Up to 6 miniRotars can work simultaneously, or operate independently. Each can set it's own temperature, adjust speed, release vacuum etc., without interfering other rotary evaporator units.



Array rotary evaporator connect with chiller



Array rotary evaporator connect with solvent collector

01

1/3 Size of traditional rotary evaporator

Innovatively longitudinal rotating axis design, reducing the product width to 25cm, which is one third of traditional rotary evaporator. Up to 5 miniRotars can be put into 1.8m fume hood, greatly save the space.

02

Triple efficiency of traditional evaporator

Up to 6 samples can be simultaneously processing by one people, the working efficiency is three times of the ordinary system.

03

Vacuum release independently

Each unit equips an independent quick release vacuum button, which can release the vacuum independently without interfering other rotary evaporator units.

04

Versatile and Convenient

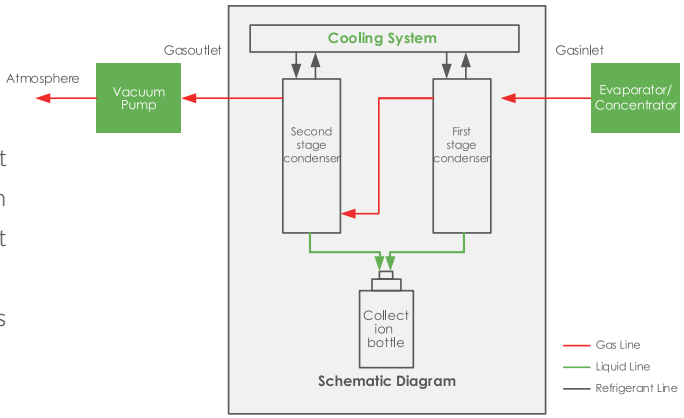
MiniRotar supports intelligent functions such as rapid vacuum lock, timed evaporation, and alternating forward and reverse rotation, which brings great convenience to the experimental work.

05

Efficient cooling, reduce pollution

Array rotary evaporator can cooling by solvent collector. The multi-stage direct condensation technology can efficiently liquefy and collect solvent vapor and reducing emission.

No cooling circulating fluid and glass condenser is needed, and it is ready to use once it is turned on.



Schematic Diagram

Rotary Evaporator

Specification	miniRotar500	miniRotar500s
Temperature range	Room temperature to 95℃	Room temperature to 95℃
Control accuracy	± 1℃	± 1℃
Temperature setting and display	Knob quick-set, digital display of target temperature and real-time temperature.	Knob quick-set, digital display of target temperature and real-time temperature.
Dry burn protection	Anti-dry buring automatic power off	Anti-dry buring automatic power off
Heating mode	Concealed heating	Concealed heating
※Direction of rotation axis	Longitudinal set	Longitudinal set
Rotation parameter setting	TFT4.3 "touch LCD screen	TFT4.3 "touch LCD screen
Rotary flask raise and drop mode	Rotary flask raise and drop mode	Rotary flask raise and drop mode
※Timing function	N/A	Yes. (Time can be set within 0-999min. Once times up,the flask will stop rotating and automatically rise out of the bath. Vacuum released and the sample will stop evaporating.)
Rotary flask	500mL	500mL
Flask connection	Standard 24/29 connection	Standard 24/29 connection
※Rotation mode	Clockwise rotation	Clockwise, counterclockwise and clockwise rotate three modes alternately.
※Vacuum release mode	Manual valve release vacuum	Quick button to release vacuum (when multiple units are working, release the vacuum of one unit, others works normally.)
Auto vacuum release when power off	N/A	Yes
※Sample observation light	USB led light	USB led light
Extraction connection	φ10mm Pagoda-Shape Connector	φ10mm Pagoda-Shape Connector
Communication interface	N/A	RS485
Power supply	AC220V 50/60Hz	AC220V 50/60Hz
Input power	700W	700W
Overall dimensions LXWXH(mm)	530 × 250 × 520	530 × 250 × 520

Vacuum Pump

Specification	eV35	eV35s
High performance diaphragm vacuum pump	High performance diaphragm vacuum pump.	Germany diaphragm vacuum pump
Diaphragm material	PTFE	PTFE
Pump head material	PTFE	PTFE
Ultimate vacuum	8mbar	8mbar
Maximum pumping speed	35L/min	34L/min
Gas connector	φ10mm Pagoda-Shape Connector	φ10mm Pagoda-Shape Connector
Power supply	AC220V 50/60Hz	AC220V 50/60Hz
Input power	240W	245W
Maximum load	Up to 6 mini rotary evaporator units supported	Up to 6 mini rotary evaporator units supported
Overall dimensions LXWXH(mm)	350 × 170 × 350	350 × 170 × 350

Vacuum Controller

Specification	eC35s
Vacuum control range	10-1050mbar
Vacuum setting accuracy	1mbar
Vacuum control accuracy	2mbar
Display	5-inch TFT touch screen
Vacuum sensor type	5
Material of contact	PEEK、PTFE、Perfluoroether rubber、PFA
Vacuum pump power control	ON/OFF can be controlled of the vacuum pump
Communication interface	RS485
Gas connector	PEEK φ10mm Pagoda-Shape Connector
Power supply	AC100-230V,50/60Hz
Input power	50W
Overall dimensions LXWXH(mm)	240 × 160 × 170

Solvent Collector

Specification	eSR220s
Cooling stage	Two stages
Lowest temperature	-20°C
Collection bottle	One
Collection bottle Volume	2000ml
Condensing pipeline ring material	Special material (Resistance to chloride)
Air pipe connection	PEEK φ10mm Pagoda-Shape Connector
Input power	500W
Power supply	AC220V 50Hz
Overall dimensions LXWXH(mm)	510 × 240 × 660

Glass Condenser

Specification	GL1000
Material	High borosilicate glass
Extraction connector	φ10mm Pagoda-Shape Connector
Water connector	φ10mm Pagoda-Shape Connector
Collection bottle Volume	1000ml
Condensing tube surface area	0.2 m^2
Material	High borosilicate glass
Fixed method	φ10mm Pagoda-Shape Connector

Recirculating Chiller

Specification	T4	T4 α	T4 β
Temperature Range	5-35℃	-10-35℃	-20-35℃
Temperature Stability	± 0.1℃	± 0.1℃	± 0.1℃
Cooling Capacity	1600W @25℃	1500W @25℃	1200W @25℃
Reservoir Volume	7L	7L	7L
Overall dimensions LXWXH(mm)	490 × 246 × 790	490 × 246 × 790	490 × 246 × 790

Specification	T3	T3 α	T3 β
Temperature Range	5-35℃	-10-35℃	-20-35℃
Temperature Stability	± 0.1℃	± 0.1℃	± 0.1℃
Cooling Capacity	1200W @25℃	1000W @25℃	800W @25℃
Reservoir Volume	5L	5L	5L
Overall dimensions LXWXH(mm)	460 × 210 × 660	460 × 210 × 660	460 × 210 × 660

Specification	T2	T2 α	T2 β
Temperature Range	5-35℃	-10-35℃	-20-35℃
Temperature Stability	± 0.1℃	± 0.1℃	± 0.1℃
Cooling Capacity	700W @25℃	600W @25℃	500W @25℃
Reservoir Volume	5L	5L	5L
Overall dimensions LXWXH(mm)	410 × 210 × 560	410 × 210 × 560	410 × 210 × 560

Specification	T1	T1 α	—
Temperature Range	5-35℃	-10-35℃	—
Temperature Stability	± 0.1℃	± 0.1℃	—
Cooling Capacity	450W @25℃	300W @25℃	—
Reservoir Volume	3L	3L	—
Overall dimensions LXWXH(mm)	350 × 176 × 550	350 × 176 × 550	—

Note:

Both the solvent collector and the recirculating chiller can cooling for the organic solvent out from the Array Rotary Evaporator. GL1000 is needed only if cooling by chiller.