



## LI-2100 Automatic Vacuum Condensate Extraction System

*The Only Automated Extraction System  
In The World*

### » Description

The stable isotope analysis technology is an important research method in many fields, such as atmospheric science, hydrology, ecology and so on. The traditional methods of plant and soil water extraction have lots of disadvantages, for example, Liquid nitrogen must be added, operation complexly, the glass components are easy to be broken. It is not only harmful to the body, but also pollute the environment. With the development of isotope analysis technology, the measuring speed of water isotope is more and more quickly, the traditional water extraction methods can not meet the needs of users.

Therefore, it is an urgent requirement to have an excellent instrument—**LI-2100 Automatic Vacuum Condensate Extraction System**: easy to operate and fast extraction system of plant, soil and other sample.

### » Working Principle

LI-2100 adopts auto ultra-low pressure and temperature condensation method, the water in the sample will be distilled and condensed by the auto ultra-low pressure system and the cooling system, so we can acquire the extracted water without fractionation successfully. LI-2100 consists of ultra-low pressure system, heating system, cooling system and controlling system. The whole operation process is monitored by the controlling system.





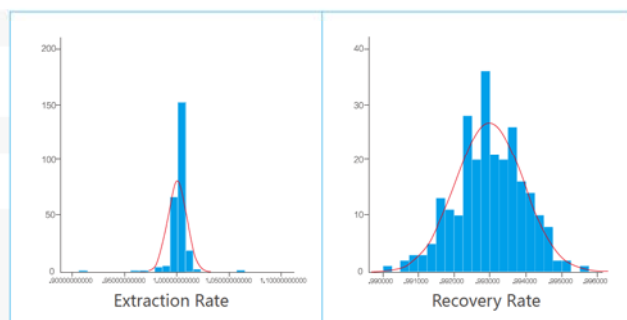
## LI-2100 Automatic Vacuum Condensate Extraction System

### » Technical Features

- 1 Follow the traditional vacuum distillation methods, reliable data;
- 2 Automatic extraction: Unattended in the whole process;
- 3 Simple Operation: No operation experiences need;
- 4 Fast and efficient: Extraction rate > 110 samples / day;
- 5 No Liquid Nitrogen needs: Fast electricity cooler;
- 6 Safe and convenient: auto power off and self-protection;
- 7 Quality control: Auto fault alarm;
- 8 The only automated extraction system in the world.



### » Specifications



- |  |   |
|--|---|
| 1 Auto ultra-low pressure and temperature condensation method                        | 7 Vacuum pump: 5L / min, 24V, maximum pressure 0.3bar   |
| 2 Extraction speed:> 110 samples / day   | 8 Cooling: DANFOSS compressor, -95 °C   |
| 3 Extraction of the number of samples: 14 / time                                     | 9 Heating: Electromagnetic heating, the max heating temperature up to 130 °C                                  |
| 4 Extraction rate:> 98%  | 10 Display and operation: 12" TFT LCD (Resolution: 800 × 480, Displaying color: 65536) touch screen           |
| 5 Recovery rate: 99% -101%   | 11 Automatic protection: when the T,temp. is beyond the set value, the heating system automatically shut down |
| 6 Pressure Accuracy: $1 \times 10^{-1} \sim 10^4 \text{Pa}$ ( $\pm 10\%$ of reading) | 12 Automatic alarm: Auto fault alarm, when Cooling system breakdown or vacuum leak                            |
| $1 \times 10^4 \sim 10^5 \text{Pa}$ ( $\pm 20\%$ of reading)                         | 13 Dimensions: 90 × 74 × 110 cm   |
| $1 \times 10^{-2} \sim 10^{-1} \text{Pa}$ ( $\pm 30\%$ of reading)                   | 14 Weight: 120 kg   |



**Manufacturer: LICA United Technology Limited**

Tel: 86-10-51292601 Fax: 86-10-82899770

Web: [www.li-ca.com](http://www.li-ca.com) E-mail: [info@li-ca.com](mailto:info@li-ca.com)

Address: The 5th. Building, No.18, Anningzhuang East Road, Haidian District, 100085, Beijing, China.

