



## Household Vacuum Freeze Dryer

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### India Office

16 S/F B/S, T-Block Extn.  
Jain Colony Part-2 Uttam Nagar,  
New Delhi-110059  
info@darsunscientific.in  
(+91) 9999136670, 7835864003



### USA Headquarters

30 N Gould St, Ste R  
Sheridan, Wyoming 82801  
United States

**Darsun**Scientific

## FEATURES



New upgrade, Wifi control optional



Rotary vane vacuum pump



Oil-free vacuum pump

# Darsun Scientific

## Household Vacuum Freeze Dryer

### DSD-35 DSD-40 DSD-50

This freeze dryer can be set up with 35 recipes, which is convenient for customers to operate with one click. After many experiments and adjustments, we added fruit & vegetable, meat and liquid recipes to the recipe management to ensure that the final product meets the expected standards; You can also choose to adjust some parameters according to the product to be freeze-dried. Customize recipes to suit your needs.



### Introduction

Vacuum freeze drying is the removal of water or other solvents from the frozen samples. During the whole drying process, the sample is in liquid state and the temperature is generally lower than  $-10^{\circ}\text{C}$ . The purpose of vacuum freeze drying is to restore the original characteristics of the sample after rehydration.

Because the drying process is carried out at low temperature, it can be used for some materials such as proteins, which are easy to be denatured at high temperature, and can ensure that the properties of other compounds will not change.

Most of the biological products, such as tissues, tissue extracts, bacteria, vaccines and serum, were changed into dry samples by vacuum freeze-drying. Vacuum freeze drying is the most gentle process to preserve the biochemical properties of sensitive tissue or other tissues. It is also the best method for drying inorganic materials, such as nano particles, because the surface area of particles is almost unchanged.

### Characteristics

Different size, suitable for home use.

The cold trap is made of stainless steel, which is corrosion-resistant and easy to clean.

With automatic fast defrosting function to improve efficiency.

35 kinds of custom recipes can be set.

The number of pallet layers can be customized.

New upgrade, Wifi control optional.

| Model                        | DSD-35                            | DSD-40                            | DSD-50                             |
|------------------------------|-----------------------------------|-----------------------------------|------------------------------------|
| Freeze-dried area            | 3.5m <sup>2</sup>                 | 4m <sup>2</sup>                   | 5.0m <sup>2</sup>                  |
| Power                        | 5500W                             | 6500W 220V                        | 700W                               |
| Ultimate vacuum              | 5 pa                              | 2                                 | 5 pa                               |
| Cold trap temperature        |                                   | -65 °C                            |                                    |
| Processing capacity(kg)      | 35-40                             | 40-50                             | 50-60                              |
| Material trays               | 14                                | 14                                | 18                                 |
| Tray size(mm)                | 400X600X30                        | 485x600x30                        | 490X540X30                         |
| Space between partitions(mm) | 45                                | 50                                | 50                                 |
| Dimensions(mm)               | 810X1460X1370                     | 1475X850X1520                     | 1600X1250X1780                     |
| Packing size(mm)             | 930X 1680X 1560                   | 1550X1010X1730                    | 1640X1400X1880                     |
| Fresh food per batch         | 38-36kg<br>(84-101 lbs)           | 44-48kg<br>(97-106 lbs)           | 55-65 kg<br>(121-143 lbs)          |
| Tray area                    | 3.5m <sup>2</sup><br>(5425 sq in) | 4.0m <sup>2</sup><br>(6200 sq in) | 5.0 m <sup>2</sup><br>(7550 sq in) |
| Tray qty                     | 14 pcs                            | 18 pcs                            | 18 pcs                             |
| G.W/N.W                      | 445kg/322kg                       | 435kg/530kg                       | 820kg/700kg                        |