

FREEZE DRYER

Perfect for any lifestyle



- ✓ Fresh food per batch up to 7-20 kg
- ✓ Tray space 0.45-2.05 m²
- ✓ Food preservation up to 25 years

Why Freeze Dry?

Features & Benefits



Prepare for Any Emergency

Freeze-drying food with an Airwoods freeze dryer is an excellent way to prepare for emergencies, offering reliable food storage for natural disasters, man-made disasters, and financial distress. It ensures you have control over your family's survival during crises and provides peace of mind by creating a high-quality emergency food supply.



Pet Nutrition

Freeze drying pet food at home with an Airwoods freeze dryer allows you to provide your pets with healthy, preservative-free meals at a lower cost. This method supports a raw diet, which many believe is best for pets, and lets you customize the food to suit your pet's tastes, ensuring they enjoy their meals while you control the quality and ingredients.



Food Storage and Preservation

Freeze-drying is an ideal method for preserving home-grown fruits and vegetables, keeping them fresh for years. Unlike canning and dehydrating, freeze-drying maintains the nutritional value, taste, color, and texture of the food. This method not only preserves your garden harvest effectively but also helps save money on grocery costs.



Gardening

Freeze drying is the best way to preserve your garden harvest, keeping fruits and vegetables fresh for years. It retains nearly all the nutrients, unlike canning, and maintains the original taste, color, and texture, unlike dehydrating. This method not only preserves your produce effectively but also helps save money on grocery costs.



Outdoor Lifestyle

Freeze drying food is perfect for outdoor enthusiasts, offering lightweight, easy-to-prepare meals for hiking, backpacking, hunting, fishing, camping, and road trips. It allows you to enjoy your favorite homemade or restaurant meals in the wild, preserve excess meat or fish, and create delicious, non-refrigerated meals for your next adventure.



Healthy Living

An Airwoods freeze dryer promotes healthy living by preserving your favorite fresh foods with minimal nutrient loss, making them readily available whenever you need them. It supports special diets, such as gluten-free, vegan, and paleo, ensuring access to suitable foods. The food is safe without contain any preservatives, colourings or artificial flavourings, bring health to children, elderly and other families.



Prevent Food Waste

The average American family wastes a lot of food. A recent study by the USDA found that the average American wastes about one pound of food per day, which can cost the average family up to \$2,400 per year. Preserve the healthy food you buy or grow with a freeze dryer and save money by eliminating waste.

Why Preserve Food?



\$2,275

Average American family food waste per year



FOOD SAFETY

For the elderly, children, and their families



FOOD PRESERVATION

For astronaut can be stored for a long time, with full flavor and taste the four seasons



KEEP FOOD

Ready for the future, like wars, typhoons, natural disasters and etc

Benefits of Freeze Drying

Features & Benefits

Preserve your garden produce, create the perfect emergency food supply, make camping meals and healthy snacks. Unlike other methods of food preservation, freeze drying does not shrink or toughen the food, and retains flavor, color, and nutrition.

NUTRITION

Freezing at -50°C, vacuum drying below 10 pa, 97% nutrition retention. Traditional heat drying foods typically lose 40% to 50% of their essential nutrition during heating and about 40% of their nutrition retain during canning.



SHELF LIFE

Refrigerated, frozen and canned foods simply don't last very long. Freeze-dried food can last up to 25 years and does not need to be rotated like other foods. Freeze-dried food is perfect for home storage.



TASTE

Freeze-dried fruits and vegetables taste the same as fresh fruits and vegetables after adding water, keep the original flavor and look. Airwoods freeze dryers produce food that looks and tastes better than store-bought freeze-dried food.



VERSATILITY

Freeze drying is great for fruits and vegetables, but unlike other options, it also perfectly preserved meat, fish, dairy, eggs, ice cream, and even fully cooked meals.



FUN

Discover how fun and delicious freeze-dried desserts and snacks can be! From freeze-dried ice cream to gummy bears and everyone's favourite - Skittles! There is such a demand for freeze-dried sweets that many companies specialising in freeze-dried sweets are taking off.



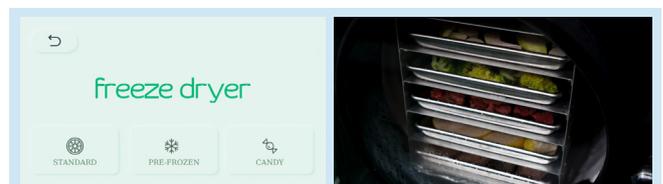
SAVE

The food you freeze dry at home is much less expensive than store-bought, you also freeze dry all your leftover meals.



EASY

Place the food in the chamber, press START, and smart sensors will detect the water content of the food and run automatically. The freeze-drying process is complete when you hear a bee.



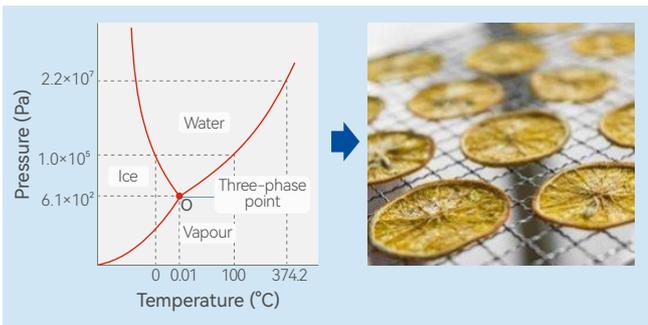
Working Principle of Freeze Dryer

Features & Benefits



Common drying technology:

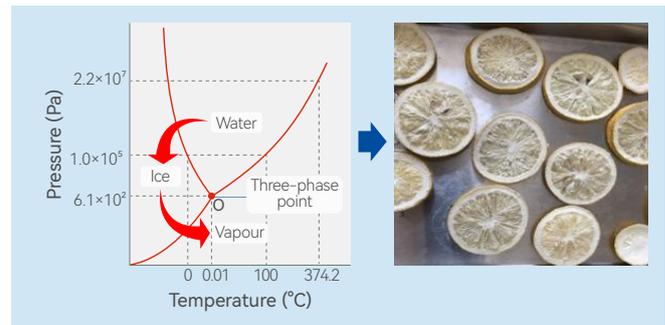
Water → Steam



- Sun drying, boiling drying, heat drying, spray drying, vacuum drying, etc. are above 0°C, and water evaporates into steam.
- The volume of ordinary dry matter becomes smaller, the texture becomes hard, the epidermis is oxidized, and the internal water is completely precipitated.
- Make the internal heat sensitive substances, protein, vitamin denature.
- Microorganisms, biological enzymes lost activity.
- The substance is not easy to dissolve in water, and the state changes greatly before drying.

Freeze vacuum drying technology:

Water → Ice → Steam



- Freeze-vacuum drying technology is to make the water content frozen to -50°C above, water cooling frozen into solid, ice under the vacuum state directly sublimate to steam for extraction.
- Vacuum drying under 0°C and frozen state, solid ice directly converted into steam for precipitation, volume basically does not change.
- The internal heat sensitive substances, proteins, vitamins, microorganisms do not denature.
- The rehydration rate is higher, after and before dehydration remain consistent.

Why Airwoods Freeze Dryer?

Features & Benefits

Small Size with Bigger Capacity

The Airwoods Freeze Dryer has an elegant design with smaller size. There are five trays with a surface area of 0.44 m². It has a bigger freeze drying capacity of 15.5%, less drying time of 15% and less energy consumption of 15%.

Smart Control

User friendly touch screen control, easy to use. All freeze drying processes run automatically with the intelligent control logic based on the detected temperature and pressure sensors in the freeze chamber. It has very smart functions like power failure memory function, exhaust valve not closed reminder or vacuum oil change reminder.

Reliable High Vacuum Electronic Component

Airwoods freeze-drying vacuum is less than 10 Pa, while other competitor is above 26 Pa. The high vacuum design reduces freeze-drying time and improves drying efficiency. There are many high vacuum electronic components inside the unit to make sure the reliable performance, such as the self-developed high vacuum joints, special vacuum sensors, food-grade high-strength freeze-drying chamber, etc.

Multifunctional Door Hinge

The Multifunctional door hinge is patented design with full functionality and high structural strength. The hinge can adjust the front to back distance for door installation, and the special slot can avoid the sway of the door hinge.



Aviation Grade Acrylic Door

The aviation grade acrylic door can stand the high vacuum status, it will not deform or fragment under vacuum drying below 5 pa.

Patented Exquisite Appearance

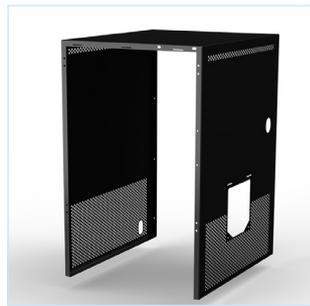
Exquisite patented design and professional modular structure, three independent functional areas, and an exquisite appearance for home kitchen appliances.

Universal Wheel

Airwoods freeze dryer is equipped with the universal wheels, so the unit is movable. It's easy to move the unit from one place to another place.

Compact and Robust Design

The top and side panels are integrated into a U-shaped design, making the structure more robust. The integrated design is aesthetically pleasing and seamless. Adoption of top-quality insulating materials and sealing design can avoid unnecessary loss of energy.



High Quality Compressor

Main components from the world's leading brand such as Cubigel compressor and upgraded electronics enhance reliability. In addition, the quality of freeze-dried food is better and processing is faster.



Cubigel Compressor

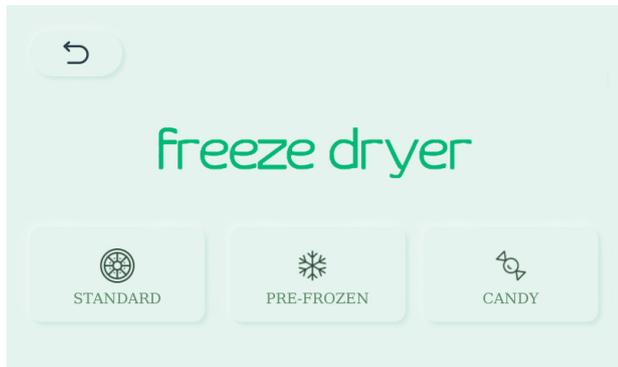
Industrial Pump

At no extra charge, the units come with Premier industrial vacuum pump that is better and more reliable than any other pump out there. The specially designed oil filter pot included in each package increases the number of vacuum oil cycles, saving time and money for oil changing.



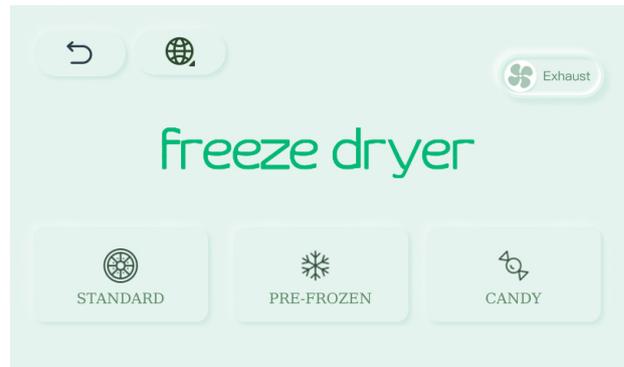
Control Functions

Standard Model

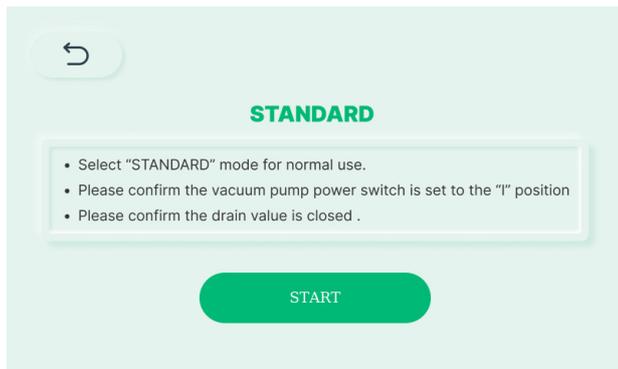


Three modes: PRE-FROZEN mode, STANDARD mode, CANDY mode; for normal freeze drying, simple operation, sensor and programme will be completed automatically, no need for manual input of parameters and manual insertion of sensors.

Fully Automatic PRO Model

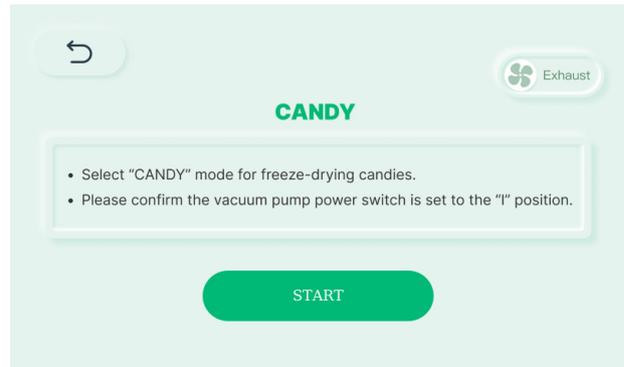


Fully Automatic Pro Model also has three mode, Pre-frozen, standard and candy mode. When put Pre-frozen food into the freeze dryer, can reduce the freezing drying time.



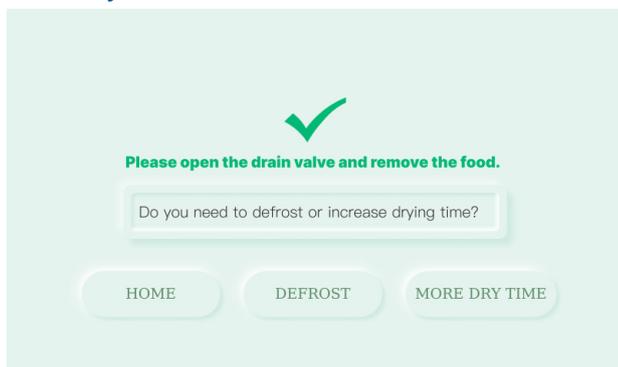
Drain value reminder, when this alert shows up, you need to check the following:

1. The door is closed well.
2. The discharge valve is closed.
3. The vacuum hose is connected correctly, etc.



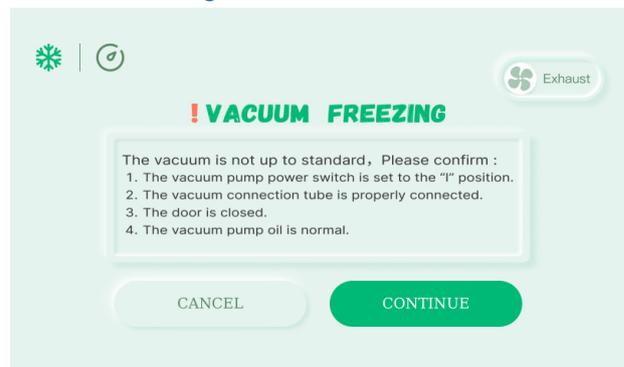
New function Candy mode only use for freezing dried Candy only, it requires 2 to 4 hours only to complete one batch, saving more time, more simple.

More Dry Time



If additional freeze-drying time is needed, please reload the food in the dryer, close drain value and the door, press "MORE DRY TIME". Default is 2 hours, each press increases drying time by 1 hour, but you can manually increase or decrease the time.

Vacuum Warning and Instructions



If the vacuum cannot reach the set value, it shows warnings, please check one by one. After the problem is fixed, it needs minutes to drop the vacuum, the warning disappears. The dryer keeps frozen to protect the food from spoiling before the vacuum drop to the value. After solving the problem, click "Continue" and the system will continue to the next stage.

Technical Parameters

Build Your Freeze Dry System

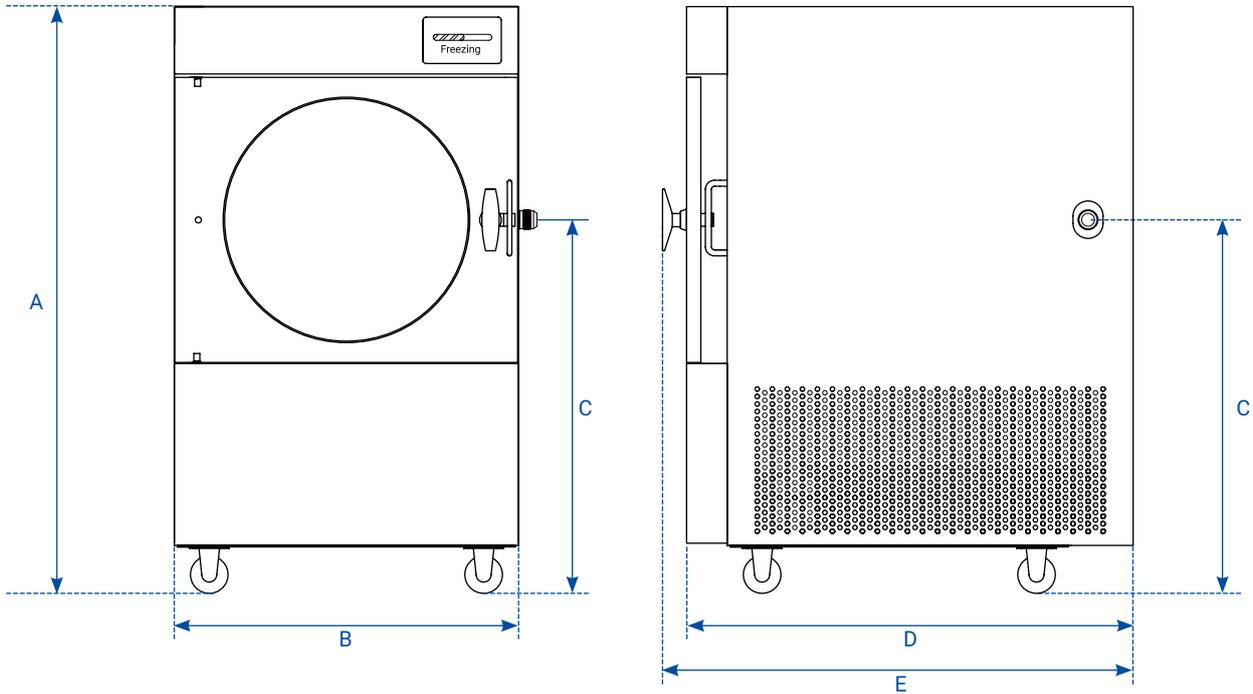
Freeze Dryer	Medium Size (5 trays)	XL Size (7 trays)	XL Size (10 trays)
Colour	 ● Black ○ White	 ● Black ○ White	 ● Black ○ White
Size	M	XL	XL
Drain Control System	Manual drain / auto-drain	Auto-drain	Auto-drain
Tray Dimensions (W×L×H)	7.5"×18"×0.75" / 195mm×460mm×20mm	10.6"×30"×0.83" / 270mm×760mm×21mm	10.6"×30"×0.83" / 270mm×760mm×21mm
Tray Quantity (pcs)	5	7	10
Freeze-drying Area (m ²)	0.45	1.43	2.05
Layer Space of Shelf (mm)	44	47	35
Compressor Brand	Cubigel	Cubigel	Cubigel
Climate Class	SN / N / ST	SN / N / ST	SN / N / ST
Rated Voltage / Frequency (V/Hz)	220V/50-60Hz or 110/60Hz	220V/50-60Hz	220V/50-60Hz
Rated Power (W)	1400	2600	3100
Rated Current (A)	8	12	14
Foaming Agent	Cyclopentane	Cyclopentane	Cyclopentane
Energy Consumption (kW/24h)	9.33	28	33.6
Total Gross Volume (L)	44	155.7	155.7
Refrigerant / Amount	R410A / 225 g	R410A / 498g	R410A / 498g
Freezing Capacity (kg/24h)	7	20	20
Freeze-drying Ability (once) (kg)	4-9	10-15	12-20
Net Weight (kg)	60	124	130
Noise (dB)	≤63	≤63	≤63
Product Dimensions (mm) (W×D×H)	458×594×795	618×914×979	618×914×979

INCLUDES:

Freeze Dryer, Industrial Vacuum Pump, Oil Filter Pot, Stainless Steel Trays, Owner's Manual, Clean Shovel and Aluminum Foil Sealing Bag (10 pcs).



Dimensions



Unit: mm

Model	A	B	C	D	E
Medium Size	795	458	500	594	635
Large Size	979	618	604	914	946

Installation Diagram



Unit: mm

Model	F	G	H
Medium Size	700+	750+	850+
Large Size	1,000+	1,000+	1,010+

FREEZE DRYER

Perfect for any lifestyle

- Fresh food per batch up to **7-20 kg**.
- Tray space **0.45-2.05 m²**.
- Energy consumption for per batch: M size is **9.33 Kw.h/24h**,
L size is **33.6 Kw.h/24h**.
- Food preservation up to **25 years**.



Other Accessories

Picture	Accessory Name	Specifications	Product Code
	Oil filter pot	Filtration capacity: 1 liter per time Material: Plastic	FDA-02
	Oil filter cartridge	Filter cartridge special for VPO-46# Under normal conditions, it is filtered 20-30 times	FDA-03
	Stainless steel trays	<ul style="list-style-type: none"> • M size 7kgs freeze dryer with 5 trays, each tray size: 195x460x20mm • L size 20kgs freeze dryer with 7trays, each tray size: 270x760x20mm • L size 20kgs freeze dryer with 10 trays, each tray size: 270x760x20mm Material: 304 stainless steel	FDA-04
	Chamber cover	Size: ø315 mm Material: Food grade sponge	FDA-05
	Clean shovel	Size: 75×167 mm Material: Plastic	FDA-06
	Sealing jar	Volume: 1500 ml Material: Glass	FDA-07
	Aluminum foil sealing bag	Size: 230×350 mm Material: Aluminum	FDA-08
	Desiccant	Weight: 3g/pc×67 pc Material: Silica gel	FDA-09
	Mylar bags	Size: 250×200 mm Material: PA+PE 7-Layer Coextrusion	FDA-10
	Vacuum sealer	Power: Rated frequency 50-60Hz, Rated voltage 110-220V AC, Rated power 85 W The shell is made of ABS plastic.	FDA-11

User's Guide



WHAT FOODS WORK BEST FOR FREEZE DRYING?

More than 100 kinds of food can be freeze-dried, including meat, cheese, fruit, vegetables and dairy products. Whole meals can also be freeze-dried for short or long term storage.

Fruit is ideal for freeze-drying. It is delicious and easy to prepare. From apples to watermelons, all you need to do is cut them into good-sized pieces that will fit on the trays.



Vegetables also freeze very well. From avocados to tomatoes, they are best stored raw and freeze-dried in slices about half an inch thick. Poultry, seafood and red meat are perfect for freeze-drying. You can freeze-dry raw or cooked meat. Both freeze-dry perfectly.

Eggs can also be eaten raw or cooked when freeze-dried. Cheese, meat and vegetables can be mixed with the eggs before drying. Raw freeze-dried eggs are great for baking and can be used to make great omelets and scrambled eggs.



Freeze-dried yogurt is delicious. All flavors and types dry well. Even ice cream and ice cream sandwiches can be freeze-dried.



Ice cream scoop



Yogurt



Ice cream sandwiches

Meat: beef, pork, ham and etc.

Vegetables: nearly all.

Fruit: nearly all.

Medical: samples, serums and other rare medical materials.

Pet food: dog and cat food.



Cost Advantage of Freeze Drying

When comparing the expense of freeze drying your own food to the cost of commercially prepared freeze-dried foods, in-home freeze-drying will cost as little as one-fifth as much. That means you could save \$20 to \$50 on each #10 (gallon) can equivalent that you freeze dry yourself. The accompanying table illustrates how a family can establish a good stock of freeze-dried food at a fraction of the commercial price by buying the equivalent amount of food as in a commercial #10 can and then freeze drying it themselves.

COMPARISON TABLE (Retail freeze-dried food versus freeze-dried food)

	Cost of Retail Freeze-dried Food	Cost to Freeze Dry Food
Food product in a #10 can or one gallon equivalent	Freeze Dried Price (Leading Brands)	Fresh Food Purchased at Store
Asparagus	\$55.00	\$8.95
Beef	\$76.99	\$8.41
Chicken	\$52.99	\$6.74
Peaches	\$42.00	\$3.90
Pineapple	\$44.00	\$10.57
Raspberries	\$46.99	\$14.20
Corn	\$29.00	\$4.29
Green Beans	\$34.00	\$3.09
Pork Chops	\$76.87	\$15.60
Cheddar Cheese	\$49.95	\$7.05
Mozzarella Cheese	\$49.95	\$7.05
Blueberries	\$42.99	\$10.92
Bananas	\$29.00	\$2.24



Emergency Prep



Garden & Orchard



Camping & Hunting



Food Storage



Healthy Living



Pet Food



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