



TOPTION LG series food freeze-dryer is a new type of product developed by our company based on the accumulated experience in the fields of heat,vacuum, refrigeration, pressure vessel manufacturing and intelligent control technology.



## Technological Advantages

- Pre-freezing and drying separated structure can be carried out simultaneously, which improves the freeze-drying efficiency and shortens the freeze-drying time.
- •Aerospace grade aluminum alloy shelf material, double-sided radiation heating, radiation rate up to 90%, good temperature uniformity.
- •High efficiency mixed refrigerant medium, low solidification point and high boiling point, high heat transfer efficiency, long service life.
- •The patent gas diversion 3D design and control technology has strong water catching ability and high drying efficiency.
- •The trays are made by aviation rust proof aluminum alloy and has high heat absorption rate through special surface treatment. Each drying chamber is equipped with 2 sets of trays.
- •Industrial embedded touch screen + dedicated SH-HPSC-III modular controller, the system is stable and reliable, high control accuracy.
- •The specially designed FD-MANAGER control system can :save many sets of technological formulations and adjust the process in real time during the drying process to improve the technological optimization rate.
- •Flexible manual + automatic control mode, manual for groping process, automatic batch production.
- •Accurate sensor calibration function ensures long-term reliability and stability of process parameters.

It can set user level and password, operation management under authority.





#### ■ Scope of application

The equipment adopts accelerated sublimation theory design and energy-saving control technology. It is widely used in freeze-drying of meat, vegetables, fruits, aquatic products, soybean milk, beverages, soups,health products and other foods. It can also meet the requirements of GMP and HACCP certification system.







Freeze-dried

Cordyceps



Freeze-dried meat Freeze-dried fruit Freeze-dried Panax

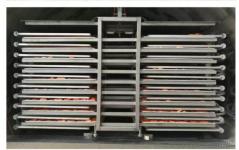
notoginseng

wolfberry

Freeze-dried sea cucumber









# **Technical parameter**

				1			1
Unit	LG-5	LG-10	LG-20	LG-30	LG-50	LG-100	LG-200
m²	5	10	20.6	31.68	52.92	105.84	209.52
kg	50	100	200	300	500	1000	2000
Layers	5+1	10+1	13+1	14+1	15+1	10+1	15+1
mm	80	65	65	65	75	70	70
Set	-	-	-	-	2	6	8
$^{\circ}$ C	RT~120℃						
Kg/bat	≥ 60	≥ 120	≥ 400	≥ 600	≥ 800	≥ 1600	≥ 3200
ch							
$^{\circ}\!\mathbb{C}$	≤ -50	≤ -50	≤ -50	≤ -55	≤ -50	≤ -50	≤ -50
-	Air cooling Water cooling Water temperature ≤30 °C						C
-	Spraying + soaking						
ра	<20						
kw	25	40	50	60	120	200	440
m³/h	10	20	40	60	80	160	300
L/min	20	20	30	30	30	30	30
	m² kg Layers mm Set °C  Kg/bat ch °C  - pa kw m³/h	m² 5 kg 50 Layers 5+1 mm 80 Set - ℃  Kg/bat ≥ 60 ch	m²     5     10       kg     50     100       Layers     5+1     10+1       mm     80     65       Set     -     -       °C     Set     -       Kg/bat     ≥ 60     ≥ 120       ch     Set     -       °C     Set     -       Air cooling       -     Air cooling       kw     25     40       m³/h     10     20	m²       5       10       20.6         kg       50       100       200         Layers       5+1       10+1       13+1         mm       80       65       65         Set       -       -       -         C       Set       -       -         Kg/bat       ≥ 60       ≥ 120       ≥ 400         ch       Set       -       -         -       Air cooling       Section       Section         -       Section       Section       Section       Section         -       Air cooling       Section       Section       Section       Section       Section         -       Air cooling       Section       Section <t< td=""><td>m²       5       10       20.6       31.68         kg       50       100       200       300         Layers       5+1       10+1       13+1       14+1         mm       80       65       65       65         Set       -       -       -       -         Kg/bat       ≥ 60       ≥ 120       ≥ 400       ≥ 600         ch       °C       ≤ -50       ≤ -50       ≤ -55         -       Air cooling       Water cooling         -       Spraying + straight         pa       &lt;20</td>         kw       25       40       50       60         m³/h       10       20       40       60</t<>	m²       5       10       20.6       31.68         kg       50       100       200       300         Layers       5+1       10+1       13+1       14+1         mm       80       65       65       65         Set       -       -       -       -         Kg/bat       ≥ 60       ≥ 120       ≥ 400       ≥ 600         ch       °C       ≤ -50       ≤ -50       ≤ -55         -       Air cooling       Water cooling         -       Spraying + straight         pa       <20	m²       5       10       20.6       31.68       52.92         kg       50       100       200       300       500         Layers       5+1       10+1       13+1       14+1       15+1         mm       80       65       65       65       75         Set       -       -       -       2         C       RT~120 °C       RT~120 °C         Kg/bat ch       ≥ 60       ≥ 120       ≥ 400       ≥ 600       ≥ 800         ch       °C       ≤ -50       ≤ -50       ≤ -55       ≤ -50         -       Air cooling       Water cooling Water ten         -       Spraying + soaking         pa       <20	m²       5       10       20.6       31.68       52.92       105.84         kg       50       100       200       300       500       1000         Layers       5+1       10+1       13+1       14+1       15+1       10+1         mm       80       65       65       65       75       70         Set       -       -       -       2       6         **C       **RT~120**C       **RT~120**C         Kg/bat ch       ≥ 60       ≥ 120       ≥ 400       ≥ 600       ≥ 800       ≥ 1600         ***C       ≤ -50       ≤ -50       ≤ -55       ≤ -50       ≤ -50         -       Air cooling       Water cooling Water temperature ≤ 30         -       Spraying + soaking         -       <

www.toptionlab.com info@toptionlab.com 0086-29-88763980 0086-29-88763980 www.toptionlab.com info@toptionlab.com





# User Site























5 www.toptionlab.com info@toptionlab.com 0086-29-88763980 www.toptionlab.com info@toptionlab.com 0086-29-88763980 **06** 





### **▮** Freeze-drying cases

After-freeze-drying Before-freeze-drying Freeze-dried hawthorn Freeze-dried sea Freeze-dried shiitake cucumber slices Freeze-dried egg Freeze-dried bitter melon Freeze-dried meat Freeze-dried apple Freeze-dried fig Freeze-dried kiwifruit Freeze-dried okra Freeze-dried Rose Freeze-dried corn

www.toptionlab.com info@toptionlab.com 0086-29-88763980 www.toptionlab.com info@toptionlab.com 0086-29-88763980 **08**