

# SCIENTZ-ND FREEZE DRYER WITH HEATING FUNCTION SYSTEM

The ND freeze-dryer adds heating to the N-series, accelerating the drying process, saving energy, and providing heating curve settings with a variety of drying solutions for laboratory use.

This series of freeze dryer is divided into four configurations: ordinary type, gland type, multi-manifold general type, multi-manifold gland type, with pre-freeze function.



**A: Ordinary model**

Suitable for bulk materials, liquids and solids drying



**B: Top press model**

Suitable for the drying of Schering bottled material, the vacuum bag can be sealed and sealed by the sample, including the common type of using function



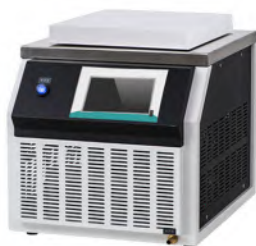
**C: Multi-pipeline model**

Suitable for bulk materials or small materials of freeze-dried, while the external freeze-dried bottles, eggplant-shaped bottles, jars



**D: Top press multi-manifold model**

Contains the use of ordinary multi-manifold features, enabling the vacuum bagging of the sample envelope, to meet most of the laboratory technical requirements



SCIENTZ-10ND



SCIENTZ-12ND



SCIENTZ-18ND

## FEATURES

- The machine uses the international brand Danfoss compressor refrigeration, refrigeration quickly, cold trap temperature is low.
- 7-inch true color touch LCD screen control system, easy to operate, and powerful.
- Industrial embedded operating system, ARM9 core control circuit design, 32M memory 128M FLASH, the operation response speed, large amount of stored data.
- The control system automatically save the freeze-dried data, and can be real-time curve and historical curve in the form of view, the entire freeze-drying process clear.
- The drying room with colorless transparent polycarbonate drying room, the sample is clear and intuitive, can observe the whole process of freeze-drying.
- Vacuum pump and host connection using the international standard KF quick connector, simple and reliable.
- The machine can store multiple freeze-drying curve, and use U disk to extract data to the computer, with the host computer software in the computer to browse print and a variety of options.
- The control system has 36 freeze-drying curve program options, each program contains 40 temperature control settings, can achieve a variety of materials freeze-drying process parameters recorded, a material freeze-dried time directly transferred to the corresponding program The
- The company's unique point heating heating curve calculation method, the temperature is more stable, no overshoot, temperature control more accurate.
- Equipped with inflatable valve, can be filled with dry inert gas;
- Partition temperature adjustable, controllable, can be explored, pilot and production process
- With manual and automatic two modes of operation, you can manually explore the new material freeze-dried curve

## TECHNICAL PARAMETERS

Mod	Scientz-10ND				Scientz-12ND				Scientz-18ND				
Type	Type	Ordinary	Top press	Ordinary multi-pipeline	Top-press multi-pipeline	Ordinary	Top press	Ordinary multi-pipeline	Top-press multi-pipeline	Ordinary	Top press	Ordinary multi-pipeline	
Dryer area(m <sup>2</sup> )	0.125	0.08	0.125	0.08	0.125	0.08	0.125	0.08	0.18	0.09	0.18	0.09	
Ability to capture water(Kg/batch)	3	3	3	3	4	4	4	4	6	6	6	6	
Schering bottle quantity	Φ12mm	920	560	920	560	920	560	920	560	1320	990	1320	990
	Φ16mm	480	285	480	285	480	285	480	285	698	349	698	349
	Φ22mm	260	165	260	165	260	165	260	165	360	184	360	184
Eggplant shape bottle	/	/	8	8	/	/	8	8	/	/	8	8	
Plate load capacity (L)	1.5	1	1.5	1	1.5	1	1.5	1	2	1	2	1	
Plate size(mm)	Φ200	Φ180	Φ200	Φ180	Φ200	Φ180	Φ200	Φ180	Φ240	Φ200	Φ240	Φ200	
Plate distance (mm)	70												
Plate size(pc)	4	3	4	3	4	3	4	3	4	3	4	3	
Cold chamber size(mm)	Φ250×150				Φ250×250				Φ300×405				
Cold trap the lowest temperature(°C)	≤-56 (No load)												
Ultimate vacuum(Pa)	≤5 (No load)												
Power Kw(220V50Hz)	1.11	1.07	1.11	1.07	1.16	1.12	1.16	1.12	1.46	1.42	1.46	1.42	
Ambient temperature(°C)	≤25												
Temperature range	-55°C-+60°C												
Overall dimension(mm)	590(L)×460(W)×400(H)+440				600(L)×450(W)×720(H)+440				670(L)×525(W)×910(H)+480				
Weight(Kg)	59	65	61	67	67	74	69	76	83	89	86	91	
Special note	The device size and weight not included in the external vacuum pump Top press model height not included in manual gland handle (The handle height 70mm)												