

LyoAir series

Laboratory freeze dryer

Optimize and simplify your freeze-drying process

Taking advantage of the experience and knowledge in freeze drying, Antech offers LyoAir series ready-to-use freeze-drying system, fully equipped with universal drying package & vacuum pump.

LyoAir series freeze dryers are compact in design, high-efficiency in performance, smart in operation, and dependable in daily use.



► Innovative features

- Compact, high-performance laboratory systems with a small footprint
- 7" touch screen installed with LyoBasic operating system
- Built-in ice condenser coils for higher efficiency
- Low noise level: 48 dB(A)
- High quality vacuum pump

► LyoBasic touch screen control system

7" touch screen controller, installed with LyoBasic operating system, assisting users to simplify the freeze-drying process.

- Display of ice condenser temperature and vacuum degree
- Product temperature display according to sublimation pressure curve
- Historical data recorder for convenient analysis of processing
- Password access protection



► Advanced cooling system

- -55°C: single compressor system, high efficiency
- -85°C: 2-compressor cascade system, cold trap temperature reaches -85°C within 10 minutes
- SECOP brand compressor for durable use

► Optimized flange seal

- Flat surface & L-shaped sealing ring design, no need for extra manual pressure
- Vacuum grease not required, easier to use and clean
- Proven excellent sealing performance for long-term use



► Choose the system fits your application best!

Product designation format

LyoAir **4** **S/M**
 Product series Ice capacity (in kg) Temperature level

► Ice capacity

Max. ice capacity	Performance	Models
4 kg	4 kg/24h	LyoAir 4S, LyoAir 4M

► Temperature level

Temperature level	Temperature	Cooling system	Typical application area
S	-55°C	1 compressor	Aqueous products
M	-85°C	2 compressors cascade	Products with low freezing points

*For vacuum controlled freeze drying process, please choose LyoPro series.

*For organic solvent application, please choose LyOrganic series freeze dryers.

► The UNIVERSAL package with special price

Start your lyophilization with our universal package, which offers both manifolds and shelves, fulfilling most applications for successful processes every day.

► The LyoAir Series with UNIVERSAL package contains:

- LyoAir freeze dryer main machine
- Vacuum gauge
- Acrylic chamber with 8 connections (flask optional)
- 4-layer shelves with unique ShelfFlex™ design
- Vacuum pump & vacuum hose



► ShelfFlex™ design

Unique ShelfFlex™ design, various configurations with different number of shelves and spacing are available.

Shelves				
Configuration	Number	Φ	Area	Spacing
1	2	265 mm	0.10 m ²	140 mm
2	3	265 mm	0.15 m ²	105 mm
3	4	265 mm	0.20 m ²	70 mm
4	8	265 mm	0.40 m ²	35 mm

*For configuration 4, another 4 pcs of shelves to be ordered as optional.

► Advantages

- All-inclusive package, avoid confusion in accessory selection
- ShelfFlex™ design, adjustable shelf number and spacing with flexibility
- Cost-effective, fulfill more applications with lower cost
- Fast delivery, UNIVERSAL package always in stock for urgent demand

► Various freeze-drying packages for different applications



①



②



③



④



⑤

Manifold		Shelves				
No.	Number of connection valves	Number	Φ	Area	Spacing	Stopper
①	8	4	265 mm	0.20 m ²	70 mm	-
②	8	2	265 mm	0.10 m ²	140 mm	●
③	-	4	265 mm	0.20 m ²	70 mm	-
④	-	2	265 mm	0.10 m ²	140 mm	●
⑤	8	-	-	-	-	-

*Package 1, also named as "universal package", is recommended and supplied as standard configuration.

● Basic equipment

- Not available

► Specification



Model		LyoAir 4S	LyoAir 4M
Basic	Type	Desktop	Desktop
Ice condenser	Temperature	-55°C	-85°C
	Max. ice capacity	4 kg	4 kg
	Chamber volume	6.5 L	6.5 L
	Performance	4 kg/24h	4 kg/24h
Control	Display	7" touch screen	7" touch screen
	Operating system	LyoBasic	LyoBasic
	Ice condenser temperature display	●	●
	Product temperature sublimation	●	●
	Vacuum degree display	●	●
	Vacuum gauge type	Thermocouple	Thermocouple
	Vacuum control	-	-
	Vacuum venting	Manual	Manual
	Hot gas defrosting	-	-
Cooling system	Number of compressor	1	2
	Compressor brand	SECOP	SECOP
Power	Voltage (V/Hz)	220/50;220/60;120/60	220/50;220/60;120/60
	Rated power	900 W	1400 W
Noise level	Freeze dryer	48 (dB)	48 (dB)
Dimensions	Main unit (W x D x H)	400*430*550 mm	400*430*550 mm
Weight	Main unit	47 kg	60 kg
Universal drying package	Drying chamber	Acrylic	Acrylic
	Shelves	4	4
	Number of rubber connection valves	8	8
	Flask	○	○
Vacuum pump	Vacuum pump	●	●
	Oil mist filter	●	●
	Vacuum pump hose	●	●

The data provided refers to the base unit with ambient conditions of +10 °C to +25 °C.
Subject to change without prior notice.

● Basic equipment ○ Optional