LEOSMAK · COMPACT

LEO-004

Up to 4 kg per batch. Compact freeze dryer for pilot work, R&D and teams developing recipes before moving to a larger LEO. It freezes and dries in the same chamber, with Wi-Fi app monitoring and a 24-month warranty.



BATCH CAPACITY	AVG. ENERGY USE	SHELF AREA
4 kg	0.9 kWh / h	0.34 m²

APPLICATIONS: Freeze-Dryers for Fruit and Vegetables; Freeze-Dryers for Herbs, Spices and Microgreens

CE marked · Built in EU

Why choose the LEO-004

- **Pilot work, R&D, prototyping**: develop recipes here, then run them on larger LEO machines.
- **Freezes in the chamber**: radiant freezing and heating shelves, so no separate blast freezer. Larger LEO machines use the same recipe logic.
- **Up to 4 kg per batch**: 4 GN 1/2 trays, 0.34 m² of shelf area.
- **Build and warranty**: AISI 304 stainless-steel chamber, 0.9 kWh per hour on average, 24-month warranty extendable to 36.

CAPACITY & OUTPUT

Batch capacity (fresh load)	4 kg
Ice condenser capacity	6 kg
Total shelf area	0.34 m²
Shelf size	260 × 330 mm
Shelves	4
Trays	4
Shelf spacing	50 mm
Tray size	GN 1/2, 2–4 cm
Loading	Manual

PROCESS & CYCLE

Shelf temperature range	-35 to +70 °C
Min. condenser temperature	-40 °C
Defrosting	Automatic (≈3 h)
Defrost time	3 h
Sweets mode	Yes, vacuum-drying mode for confectionery

VACUUM & REFRIGERATION

Vacuum pump type	Oil-sealed rotary vane
Refrigeration type	Air-cooled
Refrigerant	R-452B

CONTROL & MONITORING

Control system	LCD touchscreen + Wi-Fi
Menu language	English
Data logging & recipes	Cloud admin panel: full cycle history, charts and data export · Wi-Fi app monitoring and notifications
Remote monitoring	Yes

BUILD

Chamber material	AISI 304 stainless steel
Shelf material	Stainless steel
Observation	Transparent door with LED lighting
Body color options	Jet Black, Traffic White, Stainless Steel, Other RAL
Max. noise level	65 dB(A) max. (DIN 45635)
IP protection	IP65 (DIN 60529)

POWER & FOOTPRINT

Power supply	220–240 V / 1~ / 50 Hz
Connected load	3.5 kW
Nominal power	1.8 kW
Mains fuse	16 A (standard 16 A socket)
Energy consumption (avg)	0.9 kWh/h
External dimensions (W × D × H)	500 × 650 × 770 mm
Net weight	87 kg

WARRANTY & SERVICE

Warranty	24 months (extendable to 36)

Recommended accessories

5× Stainless steel tray GN 1/2 20 mm for LEO-004	Fits: LEO-004
5× Stainless steel tray GN 1/2 40 mm for LEO-004	Fits: LEO-004
LEO-004 Warranty extension – 3rd year	Fits: LEO-004
AMARU Mineral oil for vacuum pump 10 L	Fits: all models
AMARU Mineral oil for vacuum pump 20 L	Fits: all models

More accessories in our online store: scan the QR code.

+34 614 332 324 team@freeze-drying.tech freeze-drying.tech

Scan for current specifications and prices, or to request a quotation.

Specifications are provided by the manufacturer and are subject to change without notice. Figures are for planning purposes; confirmed values are