EXEAT · LIGHT COMMERCIAL

# LIO 140 Pro

Up to 16 kg per batch on 9 stainless-steel trays, 2.3 m² of shelf area. CE-certified, European-made. The LIO 140 L with advanced process control (active pressure control, pressure-building control, fast defrost and automatic drain) for sensitive products and repeatable cycles. Oil-sealed vacuum pump as standard; the optional oil-free scroll pump version runs on single-phase 230 V.




| BATCH CAPACITY | AVG. ENERGY USE | SHELF AREA |
|---|---|---|
| 16 kg | 2.46 kWh / h | 2.3 m² |

APPLICATIONS: Freeze-Drying for Nutraceuticals & Supplements · Freeze-Dryers for Fruit and Vegetables · Freeze Dryers for Candy and Confectionery · Freeze-Drying for Ready Meals & Snacks

CE marked · Built in EU

## Why choose the LIO 140 Pro

- **For producers moving past R&D**: the step from bench trials to a small production line, without an industrial footprint.
- **Full process control**: active pressure control and pressure-building control hold chamber pressure at the recipe setpoint; fast defrost and automatic drain shorten the turnaround between batches.
- **Up to 16 kg fresh load**: 9 trays, 2.3 m² of shelf area.
- **Controlled drying**: shelf-temperature control and deep vacuum give the same texture and rehydration batch after batch. AISI 304 stainless steel, 12-month warranty, heavy-duty wheels as standard.

## CAPACITY & OUTPUT

| | |
|---|---|
| Batch capacity (fresh load) | **16 kg** |
| Ice condenser capacity | **24 kg** |
| Total shelf area | **2.3 m²** |
| Shelves | **9** |
| Trays | **9** |
| Shelf spacing | **37 mm** |
| Tray size | **37 × 69 cm** |

## PROCESS & CYCLE

| | |
|---|---|
| Shelf temperature range | **-35 to +60 °C (recipe)** |
| Min. condenser temperature | **-43 °C** |
| Defrosting | **Automatic / fast defrost (Pro)** |
| Defrost time | **1 h** |

## VACUUM & REFRIGERATION

| | |
|---|---|
| Vacuum pump | **Oil-sealed (oil-free scroll option)** |
| Refrigeration | **Air-cooled** |
| Refrigerant | **R290 (natural refrigerant, GWP 3)** |

## CONTROL & MONITORING

| | |
|---|---|
| Control system | **PLC touchscreen + Pro: pressure control · pressure-building control · fast defrost · automatic drain control** |
| Menu language | **English** |
| Data logging & recipes | **USB CSV export + recipes** |
| Remote monitoring | **No** |

## BUILD

| | |
|---|---|
| Chamber / shelf material | **AISI 304 stainless steel** |
| Mobility | **Heavy-duty wheels (standard)** |

## POWER & FOOTPRINT

| | |
|---|---|
| Power supply | **400 V / 3~ / 50 Hz (oil-sealed pump) · 230 V / 1~ / 50 Hz, 13.5 A (oil-free scroll pump)** |
| Connected load | **2.72 kW**<br>Oil-free version: 3.05 kW |
| Energy consumption (avg) | **2.46 kWh/h** |
| External dimensions (W×D×H) | **800 × 900 × 1205 mm** |
| Net weight | **295 kg** |

## WARRANTY & SERVICE

| | |
|---|---|
| Warranty | **12 months** |

## Recommended accessories

| | |
|---|---|
| AMARU Mineral oil for vacuum pump 10 L | Fits: all models |
| AMARU Mineral oil for vacuum pump 20 L | Fits: all models |
| AMARU Viktor – Ozone decontaminator | Fits: all models |
| Leosmak High-Performance Vacuum Pump Oil | Fits: all Leosmak models |
| Moisture analyzer AXIS ATS60 | 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 provided per quotation. Metric units.