In-Situ Freeze Dryer - Compact Lyophilizer for Fruits and Vegetables - -40°C - 1 to 8 kg/Batch

Model **MSLYO40-IS1FSWISS, MSLYO40-IS4FSWISS, MSLYO40-IS6FSWISS** | Brand **Master Science**







The Master Science In-Situ Freeze Dryer freezes and dries samples on the same shelves, so material never has to be moved between a freezer and a drying chamber. This in-situ design avoids contamination during transfer and is well suited to small-batch freeze drying of fruits, vegetables and similar foods.

KEY HIGHLIGHTS

- No transfer contamination
- Adjustable shelf temperature
- Easy defrost
- Process visibility

AT A GLANCE

-40°C CONDENSER TEMPERATURE (NO LOAD)	**2 / 4 / 6 kg per 24 h** ICE CONDENSER CAPACITY
0.75 / 1.1 / 2.3 kW POWER CONSUMPTION	**1-2 / 4-6 / 6-8 kg per batch** HANDLING CAPACITY

Request a Quotation
Contact us for pricing, configuration options and delivery details.

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www.themsci.com

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Overview

Three sizes provide shelf areas of 0.12, 0.34 and 0.55 m², handling 1 to 8 kg per batch. The condenser reaches -40°C, shelf temperature is adjustable to help develop drying processes, and a colour touch panel on the Master Science In-Situ Freeze Dryer shows sample and condenser temperatures and vacuum as values and curves.

Moving frozen samples between units risks contamination and thawing. The Master Science In-Situ Freeze Dryer helps with:

Key Benefits

No transfer contamination
Freezing and drying take place on the same shelves.

Adjustable shelf temperature
Helps develop freeze-drying processes.

Easy defrost
One-button defrost start.

Process visibility
Clear organic glass window and on-screen curves.

For laboratory sample lyophilization, see our benchtop freeze dryer.

Technical Specifications

GENERAL	
Brand	Master Science
Model Number	MSLYO40-IS1FSWISS, MSLYO40-IS4FSWISS, MSLYO40-IS6FSWISS
SKU	MSLYO40-IS1FSWISS, MSLYO40-IS4FSWISS, MSLYO40-IS6FSWISS
Brand	Master Science
Models	MSLYO40-IS1FSWISS (0.12 m²), MSLYO40-IS4FSWISS (0.34 m²), MSLYO40-IS6FSWISS (0.55 m²)
SKU	MSLYO40-IS1FSWISS, MSLYO40-IS4FSWISS, MSLYO40-IS6FSWISS
Freeze Drying Area	0.12 / 0.34 / 0.55 m²
Trays	3 / 4 / 4
Tray Spacing	45 mm
Condenser Temperature (no load)	-40°C
Vacuum (no load)	15 Pa
Ice Condenser Capacity	**2 / 4 / 6 kg per 24 h**
Handling Capacity	**1-2 / 4-6 / 6-8 kg per batch**
Refrigerant	CFC-free

DIMENSIONS & WEIGHT	
Tray Size (W × D)	140 × 275 mm / 200 × 425 mm / 330 × 440 mm
External Dimensions	550 × 600 × 780 mm / 500 × 640 × 900 mm / 640 × 680 × 1180 mm

POWER	
Power Consumption	0.75 / 1.1 / 2.3 kW
Power Supply	AC 220 V, 50 Hz or AC 110 V, 60 Hz

PROBLEMS THE MASTER SCIENCE IN-SITU FREEZE DRYER SOLVES	
Contamination during transfer	Samples stay on the same shelves throughout.
Unclear drying progress	Curves and a window show what is happening.
Time-consuming defrost	A single button starts defrosting.
Process development	Adjustable shelf temperature allows optimisation.

Applications

The Master Science In-Situ Freeze Dryer is used for

Freeze-drying fruits and vegetables Small-batch food preservation Home and small-business freeze drying Food product development Teaching demonstrations of freeze drying

Control

- Colour touch panel with temperature and vacuum curves
- Adjustable shelf temperature
- One-button defrost
- USB data export

Refrigeration and Vacuum

- Condenser -40°C
- High-efficiency compressor
- Vacuum pump with KF quick connector
- CFC-free refrigerant

Construction

- In-situ freeze-drying chamber
- Coil-free stainless steel condenser
- Transparent organic glass door window
- Compact design on castors

Standard Accessories Included

- Freeze dryer main unit
- Vacuum pump
- Trays