Frost-Free Cooling Incubator 103-1022 L, 0 or -10 to 65°C, 30-Segment Program, 3-Speed Fan, USB

Model MSICB-B103YBSWISS,MSICB-B152YBSWISS,MSICB-B253YBSWISS,MSICB-B412YBSWISS,MSICB-B722YBSWISS,MSICB-B1022YBSWISS,MSICB-B103YLSWISS,MSICB-B152YLSWISS,MSICB-B253YLSWISS,MSICB-B412YLSWISS,MSICB-B722YLSWISS,MSICB-B1022YLSWISS | Brand Master Science











The Master Science Frost-Free Programmable Cooling Incubator is built for long experiments where even small drifts matter. Its frost-free refrigeration avoids the temperature swings caused by ice build-up or defrost cycles, so stability holds over days and weeks.

KEY HIGHLIGHTS

- No defrost swings
- Program complex profiles
- Protect delicate samples
- Room for big loads

AT A GLANCE

YB: 0 to 65°C; YL: −10 to 65°C
TEMPERATURE RANGE

SUS304 stainless steel
CHAMBER AND SHELVES

±0.5 to ±1°C (by model)
UNIFORMITY

Frost-free design removes defrost cycles.
TEMPERATURE JUMPS DURING DEFROST

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

support@themsci.com
www.themsci.com

Scan to view online

Overview

Two versions are offered: the YB series covers 0 to 65°C and the YL series −10 to 65°C. A fuzzy PID controller stores 30 segments and 99 cycles, letting you ramp temperature and set fan speed and time step by step. The fan has three speeds to limit evaporation, and a diffusion-type duct spreads air evenly. Six sizes run from 103 to 1022 litres, with USB recording, an over-temperature cut-out and full compressor protection.

Specifications of the Master Science Frost-Free Programmable Cooling Incubator range (YB and YL versions):

For smaller benchtop needs, see our cooling biochemical incubator 81-397 L as a lighter option than the Master Science Frost-Free Programmable Cooling Incubator.

Conventional cooling incubators drift during defrost and offer little programming. The Master Science Frost-Free Programmable Cooling Incubator addresses:

Key Benefits

No defrost swings
Frost-free design keeps the Master Science Frost-Free Programmable Cooling Incubator stable through long runs.

Program complex profiles
30 segments and 99 cycles allow ramps, soaks and repeats.

Protect delicate samples
Low fan speed reduces evaporation from open vessels.

Room for big loads
Sizes up to 1022 L handle large batches or plant trays.

Technical Specifications

GENERAL	
Brand	Master Science
Model Number	MSICB-B103YBSWISS,MSICB-B152YBSWISS,MSICB-B253YBSWISS,MSICB-B412YBSWISS,MSICB-B722YBSWISS,MSICB-B1022YBSWISS,MSICB-B103YLSWISS,MSICB-B152YLSWISS,MSICB-B253YLSWISS,MSICB-B412YLSWISS,MSICB-B722YLSWISS,MSICB-B1022YLSWISS
SKU	MSICB-B103YBSWISS,MSICB-B152YBSWISS,MSICB-B253YBSWISS,MSICB-B412YBSWISS,MSICB-B722YBSWISS,MSICB-B1022YBSWISS,MSICB-B103YLSWISS,MSICB-B152YLSWISS,MSICB-B253YLSWISS,MSICB-B412YLSWISS,MSICB-B722YLSWISS,MSICB-B1022YLSWISS
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Capacity	**103 / 152 / 253 / 412 / 722 / 1022 L**
Circulation	Forced convection, balanced type
Temperature range	**YB: 0 to 65°C; YL: −10 to 65°C**
Resolution	0.1°C
Fluctuation	High temperature ±0.3 to ±0.5°C; low temperature ±0.5 to ±1°C (by model)
Uniformity	±0.5 to ±1°C (by model)
Standard shelves	2 / 3 / 3 / 4 / 4 / 4
Test port	Ø40 mm with silicone plug
Controller	Programmable fuzzy PID, 30 segments, 99 cycles
Fan	Three speeds (high, medium, low)
Chamber and shelves	SUS304 stainless steel
Exterior	Powder-coated cold-rolled steel
Base	Welded square steel with locking polyurethane casters
Refrigeration protection	Compressor overheat, over-current and over-pressure; condenser fan overheat
Electrical protection	Phase sequence and phase loss, leakage, short-circuit and overload
Operating ambient temperature	5-30°C
Data	USB for printer or flash drive

DIMENSIONS & WEIGHT	
Internal dimensions (W×D×H)	480 × 390 × 550 / 500 × 460 × 660 / 640 × 460 × 860 / 560 × 530 × 1390 / 980 × 530 × 1390 / 980 × 750 × 1390 mm
External dimensions (W×D×H)	645 × 700 × 1255 / 665 × 780 × 1360 / 800 × 780 × 1570 / 1025 × 810 × 1735 / 1445 × 810 × 1735 / 1445 × 1030 × 1735 mm

POWER	
Power supply	AC 220 V, 50 Hz
Power consumption	780 / 840 / 1200 / 1500 / 2100 / 2550 W

INCUBATION PROBLEMS THE MASTER SCIENCE FROST-FREE PROGRAMMABLE COOLING INCUBATOR SOLVES	
Temperature jumps during defrost	Frost-free design removes defrost cycles.
Fixed single setpoint	Multi-segment programs follow complex profiles.
Samples drying out	A low fan setting reduces evaporation.
No temperature record	USB recording keeps a data log for every run.

Applications

The Master Science Frost-Free Programmable Cooling Incubator is used for: BOD determination and water quality analysis Culture and preservation of bacteria and microorganisms Plant breeding and seedling experiments Long-term stability and storage studies Temperature-ramp studies in biology and agriculture

Performance

- Frost-free refrigeration
- Hot gas bypass regulation for safe compressor running
- Diffusion-type air duct for even temperature
- Three-speed circulation fan

Control and data

- Programmable fuzzy PID, 30 segments × 99 cycles
- Wide-screen display with temperature alarms
- Over-temperature protection with audible and visual alarm
- USB recording to printer or flash drive

Construction

- SUS304 chamber and adjustable shelves
- Ø40 mm test port with silicone plug
- Waterproof auxiliary lighting
- Welded steel base and locking casters

Standard Accessories Included

- Frost-free cooling incubator
- SUS304 shelves (2 to 4 depending on size)