LED Illumination Chamber 250-450 L, Up to 20000 lx, 4 to 50°C, Plant Growth Chamber with Defrost

Model **MSICB-L250BSWISS,MSICB-L350BSWISS,MSICB-L450BSWISS** | Brand **Master Science**





The Master Science LED Illumination Chamber recreates light and temperature conditions for plants, seeds, insects and cell cultures. LED cold light reaches up to 12000, 15000 or 20000 lux depending on size and can be set in six steps, while the chamber holds 4 to 50°C without light or 10 to 50°C with the lights on.

KEY HIGHLIGHTS

- Strong, adjustable light
- Stable at low temperature
- Even conditions on every shelf
- Simulate day and night

AT A GLANCE

With lighting 10-50°C; without lighting 4-50°C TEMPERATURE RANGE	**250 / 350 / 450 L** CAPACITY
1500 / 2150 / 2250 W POWER CONSUMPTION	**±1 / ±2 / ±2°C** UNIFORMITY

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

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Overview

Air is drawn in at the back and supplied from below by a large-impeller fan, and the shelves are laser-perforated so it flows evenly around the samples. A three-stage automatic defrost keeps ice from upsetting temperature during cold runs. The LCD controller handles fixed-value and timed running, with an optional program of 30 segments and 100 cycles for day-night cycles.

For a lower-intensity option, see our LED illumination incubator up to 6000 lx alongside the Master Science LED Illumination Chamber.

Window sills and greenhouses give unpredictable conditions. The Master Science LED Illumination Chamber addresses:

Key Benefits

Strong, adjustable light
The Master Science LED Illumination Chamber delivers up to 20000 lux in six selectable levels.

Stable at low temperature
Automatic three-stage defrost prevents frost-related drift.

Even conditions on every shelf
Back-suction, bottom-supply airflow and perforated shelves.

Simulate day and night
Optional 30-segment programs vary light and temperature over time.

Technical Specifications

GENERAL

Brand	Master Science
Model Number	MSICB-L250BSWISS,MSICB-L350BSWISS,MSICB-L450BSWISS
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SKU	MSICB-L250BSWISS, MSICB-L350BSWISS, MSICB-L450BSWISS
Capacity	**250 / 350 / 450 L**
Circulation	Forced convection
Temperature range	**With lighting 10-50°C; without lighting 4-50°C**
Fluctuation	±1°C
Resolution	0.1°C
Uniformity	±1 / ±2 / ±2°C
Sensor	PT100
Illumination	0-12000 / 0-15000 / 0-20000 lx
Illumination control	6-level relative illuminance
Controller	PID
Timer	1-9999 min (optional 30 segments × 100 cycles)
Chamber	Brushed stainless steel
Exterior	Electrostatically coated cold-rolled steel
Shelves	3, adjustable, perforated
Refrigerant	R134a (CFC free)
Defrost	Automatic
Safety	Over-temperature sound and light alarm; leakage protector; self-diagnosis
Display	Large LCD

DIMENSIONS & WEIGHT

Internal dimensions (W×D×H)	560 × 420 × 1050 / 560 × 530 × 1200 / 700 × 520 × 1210 mm
External dimensions (W×D×H)	660 × 660 × 1700 / 670 × 730 × 1880 / 810 × 790 × 1890 mm
Net / gross weight	103/123, 128/149, 153/175 kg

POWER	
Power supply	AC 220/110 V, 50/60 Hz
Power consumption	1500 / 2150 / 2250 W

GROWTH STUDY PROBLEMS THE MASTER SCIENCE LED ILLUMINATION CHAMBER SOLVES	
Inconsistent light levels	LED lighting is set in fixed, repeatable steps.
Temperature swings in cold runs	Automatic defrost keeps the chamber steady.
Uneven growth between shelves	Engineered airflow evens out temperature.
Manual day-night switching	Programs automate light and temperature cycles.

Applications

The Master Science LED Illumination Chamber is used for
Seed germination and seedling tests Plant cultivation and breeding Microbial, tissue and cell culture Rearing insects and small animals Environmental and climate simulation studies

Lighting and climate

- LED cold light, 6 brightness levels
- 4-50°C range, 10-50°C with lights on
- Three-stage electric defrost program

Control

- Large LCD with screen lock
- Fixed-value and timed running with end alert
- Optional 30-segment × 100-cycle program
- Self-diagnosis with fault display

Construction

- Brushed stainless steel chamber
- Laser-perforated, adjustable shelves (30 mm minimum spacing)
- Waterproof stainless steel heater
- Leakage protection

Standard Accessories Included

- LED illumination chamber
- Shelves ×3

Optional Accessories

- Test port Ø25, 50 or 80 mm
- Internal socket
- Digital independent temperature limiter
- Programmable controller with USB, RS485/232 or built-in printer
- Spare shelf
- Observation window