# Infrared Drying Oven - Fast Heating Lab Oven - 50-250°C - 72 to 270 L

Model **MSDON-IF72HSWISS, MSDON-IF138HSWISS, MSDON-IF270HSWISS** | Brand **Master Science**






The Master Science Infrared Drying Oven heats samples by far-infrared radiation, which brings the chamber to temperature quickly and uses less energy than many conventional heating systems. It is a practical choice for routine drying and heat testing in industrial, agricultural, medical and research laboratories.

### KEY HIGHLIGHTS

- Shorter drying cycles
- Lower energy use
- Restart after power cuts
- Easy cleaning
- Visual check without heat loss

### AT A GLANCE

**50 to 250 °C**
TEMPERATURE RANGE

**72 L / 138 L / 270 L**
CAPACITY

**1200 W / 1600 W / 1900 W**
POWER CONSUMPTION

**≤ ±3.5 % of maximum temperature**
TEMPERATURE UNIFORMITY

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

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## Overview

Three chamber sizes are offered, 72, 138 and 270 litres, all with a working range of 50 to 250 °C and natural air convection.

## Key Benefits

**Shorter drying cycles**
infrared radiation transfers heat directly to the sample.

**Lower energy use**
the Master Science Infrared Drying Oven runs at 1200 to 1900 W.

**Restart after power cuts**
memory resumes the program automatically.

**Easy cleaning**
rounded stainless chamber corners.

**Visual check without heat loss**
observation window in the outer door.

Need higher temperatures for ashing? See the Master Science laboratory instrument range.

# Technical Specifications

## GENERAL

| | |
|---|---|
| Brand | Master Science |
| Model Number | MSDON-IF72HSWISS, MSDON-IF138HSWISS, MSDON-IF270HSWISS |
| SKU | MSDON-IF72HSWISS, MSDON-IF138HSWISS, MSDON-IF270HSWISS |
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| SKU | MSDON-IF72HSWISS, MSDON-IF138HSWISS, MSDON-IF270HSWISS |
| Capacity | **72 L / 138 L / 270 L** |
| Heating Method | Far-infrared radiation |
| Circulation | Natural convection |
| Temperature Range | **50 to 250 °C** |
| Temperature Uniformity | ≤ ±3.5 % of maximum temperature |
| Temperature Fluctuation | ±1 °C |
| Controller | PID with LED digital display |
| Timer | Continuous or 0 to 9999 min |
| Shelves | 2 / 3 / 3, removable, adjustable spacing |
| Alarms | Over-temperature, temperature probe failure |
| Outer Casing | Powder-coated cold-rolled steel |
| Inner Chamber | Stainless steel with rounded corners |

## DIMENSIONS & WEIGHT

| | |
|---|---|
| Internal Dimensions (W × D × H) | 400 × 400 × 450 / 500 × 500 × 550 / 600 × 600 × 750 mm |
| External Dimensions (W × D × H) | 730 × 565 × 702 / 830 × 665 × 772 / 930 × 765 × 972 mm |

## POWER

| | |
|---|---|
| Power Supply | 1 phase, 220 V, 50 Hz |
| Power Consumption | 1200 W / 1600 W / 1900 W |

## COMMON LABORATORY PROBLEMS AND HOW THIS OVEN HELPS

| | |
|---|---|
| Common Laboratory Problems and How This Oven Helps | How the Master Science Infrared Drying Oven deals with typical drying issues: |
| Slow warm-up | infrared heating reaches temperature quickly. |
| Lost runs after outages | programs resume when power returns. |
| Overheated samples | over-temperature alarm and optional independent protector. |
| No temperature records | optional printer or RS485 output. |

## Applications

**Common uses of the Master Science Infrared Drying Oven**
Drying of glassware and samples Moisture removal from powders and granules Heat treatment and curing Agricultural and food sample drying Medical and research laboratories

## Heating and Control

- Far-infrared heating
- PID controller with LED display
- Timed or continuous operation

## Chamber

- Stainless steel interior
- Removable shelves with adjustable height
- Top adjustable air outlet

## Safety

- Over-temperature alarm
- Probe failure alarm
- Power-failure memory

## Standard Accessories Included

- Shelves (2 or 3 depending on model)

## Optional Accessories

- Independent external over-temperature protector
- LCD temperature controller
- LCD controller with RS485 interface
- LCD controller with micro dot-matrix printer
- RS485 to USB adapter
- Additional shelves