# Inverted Fluorescence Microscope - LED Epi-Fluorescence Cell Culture Microscope - UV/B/G, 4X-40X LWD

Model **MSMSC-IV52FNSWISS** | Brand **Master Science**





The Master Science Inverted Fluorescence Microscope has an infinity optical system with long working distance plan achromatic objectives and wide-field eyepieces. Its compact, rigid main body is stable enough to meet the anti-vibration needs of microscope work.

KEY HIGHLIGHTS

- No lamp alignment
- Room to expand
- Phase contrast as well
- Steady images

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

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## Overview

The epi-fluorescence system is modular: the LED cold light source needs no alignment and switches on and off instantly, and filter sets change quickly and safely. Three filter cubes for ultraviolet, blue and green excitation are standard on the Master Science Inverted Fluorescence Microscope, and the module can be upgraded to five channels.

> For brightfield and phase contrast only, see the Master Science inverted biological microscope.

## Key Benefits

**No lamp alignment**
: the LED source on the Master Science Inverted Fluorescence Microscope switches on and off instantly.

**Three colours as standard**
: UV, blue and green filter cubes.

**Room to expand**
: fluorescence module upgradable to 5 channels.

**Phase contrast as well**
: 10X and 20X PH objectives included.

**Steady images**
: compact, high-rigidity body.

## Technical Specifications

### GENERAL

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| General | Specifications of the Master Science Inverted Fluorescence Microscope are given below. |
| Brand | Master Science |
| Model Number | MSMSC-IV52FNSWISS |
| SKU | MSMSC-IV52FNSWISS |
| Observation Tube | Tilting trinocular, interpupillary distance 53-75 mm |
| Viewing Head | Siedentopf head, inclined at 45° |
| Eyepiece | SWF10X/22 plan eyepiece, high eye point; centering telescope |
| Objective 4X | Infinity LWD plan achromatic, Plan 4X/0.12, W.D. 10.8 mm |
| Objective 10X | Infinity LWD plan achromatic, Plan 10X/0.25, W.D. 4.1 mm |
| Objective 40X | Infinity LWD plan achromatic, Plan 40X/0.58, W.D. 2.5 mm |
| Objective 10X PH | Infinity LWD plan achromatic phase contrast, Plan 10X/0.25 PH, W.D. 4.1 mm |
| Objective 20X PH | Infinity LWD plan achromatic phase contrast, Plan 20X/0.45 PH, W.D. 5 mm |
| Epi-fluorescence Illumination | LED cold light source, continuously adjustable brightness; 3 filter cubes standard, others optional |
| Excitation | Ultraviolet (UV): 330-380 nm |
| Excitation | Blue (B): 460-490 nm |
| Excitation | Green (G): 510-550 nm |
| Nosepiece | Quintuple nosepiece, ball-bearing, with anti-fungus treatment |
| Focusing | Coaxial coarse and fine focusing with tension adjustment and upper limit stop; fine graduation 2 µm |
| Glass Round Stage Plate | Outer φ118 mm, inner φ68 mm |
| Petri Dish Holder 1 | Locating slot 86 x 129.5 mm, for φ90 mm round dishes |
| Petri Dish Holder 2 | Locating slot 34 x 77.5 mm, for φ68.5 mm round dishes |
| Petri Dish Holder 3 | Locating slot 57 x 82 mm, for φ60 mm round dishes |
| Petri Dish Holder 4 | Locating slot 29 x 77.5 mm, for φ35 mm round dishes |
| Transmitted Illumination | White LED, adjustable brightness; push-pull condenser, working distance 55 mm; green filter |
| Fluorescence Shield | 110 x 70 mm |
| Camera Port | Built-in 0.75X C-mount adapter |

### OPTICAL PERFORMANCE

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| Optics | Infinity optical system |
| Mercury lamps need warm-up and alignment | : the LED cold light source works instantly with no alignment. |
| Excitation fades as the lamp ages | : LED output stays stable over its service life. |

## COMMON PROBLEMS THIS MICROSCOPE SOLVES

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|---|---|
| Common Problems This Microscope Solves | Fluorescence on cell cultures used to mean fragile lamps and awkward set-ups. |
| Vibration blurs high-magnification images | : the rigid body resists it. |
| New dyes need new channels | : the module accepts further filter cubes, up to five channels. |

## The Master Science Inverted Fluorescence Microscope is suitable for

- **Observation of cell tissues and transparent liquid tissues**
- **Fluorescence microscopy in biopharmaceuticals**
- **Medical testing**
- **Disease prevention laboratories**

## Fluorescence System

- LED source with ultra-long service life
- Stable output throughout its life for effective excitation
- High-intensity illumination with a short optical path, safe and reliable
- Easy installation, alignment-free operation, instant on/off
- Various fluorescence filter cubes for flexible configurations
- Removable module, upgradable to 5 channels, with 3- or 4-colour bands optional

## Stand

- Infinity optical system with long working distance plan achromatic objectives
- Wide-field, high eye point eyepieces
- Compact, stable, high-rigidity main body
- Modular epi-fluorescence design for safe, rapid adjustment and filter switching
- Built-in 0.75X C-mount adapter

## Optional Accessories

- Additional fluorescence filter cubes
- 4- and 5-channel fluorescence configurations