OPTICS

Infinity Flat-Field Objectives

Developed with high-contrast infinity PLAN objectives, the Innovation microscope produces sharp, crisp, flat-field images across the entire field of view. Whether spending hours scanning cytologies or counting differentials, a flat field of view will ensure that the critical cells at the edge of view are just as clear and focused as those cells in the middle. The infinity optical system, as found on the most expensive research microscopes, is the premium platform for the highest contrast and resolution.



Objective Choices

The 4-objective model features the most common configuration - 4x-10x-40x-100x (oil) - on a 4-hole reverse nosepiece. The reverse nosepiece allows for greater access to slides for quick changes. Affordably priced, this model fits the needs of most universities and clinics.



The 5-objective model is ideal for laboratory and research use. It offers a 4x-10x-20x-40x-100x (oil) configuration on a 5-hole reverse nosepiece. The 20x objective is a useful power between the 10x and 40x for research and cytology scanning applications.

Add an optional 50x OIL objective, the finest objective available, for the highest resolution and to double the field-of-view of the 100x OIL objective. Plus, users can stay in oil while scanning under 50x then flip to the 100x for a closer look at a questionable cell, without fear of dipping the 40x objective into oil.

Eyepieces

The 10x/22mm eyepieces are the largest and widest-viewing eyepieces in this microscope class. The physical eye-tube diameter is 30mm, much larger than standard 23mm eyepieces, and the field number 22mm allows for a much broader view under each objective power. These eyepieces feature a HIGH FOCAL POINT, meaning that the eyes stay farther away allowing users to keep their eyeglasses on while using the microscope. Additionally, each eyepiece has a built-in diopter adjustment for quick corrections for a weak left or right eye. Finally, two pairs of rubber eye-guards are included…one low-profile set, and one larger set of cups for improving eye position and eliminating stray light.



FRAME

Head

The Siedentopf-type head is inclined 30-degrees for a comfortable user posture. It accommodates interpupillary widths from 50mm to 75mm and can be rotated 180-degrees upward to a higher position for taller users. Choose either a binocular head for routine use or a low-profile trinocular head for mounting any C-mount or eyetube-type camera. The trinocular head comes complete with both C-mount and eyetube pipes, which are often high-cost accessories from other major microscope brands.





Stage

The large, graphite-coated mechanical stage stands up to years of wear and tear. The rackless, belt-drive system allows the stage to operate smoothly, comfortably, and safely by eliminating the left and right projection of the gear track as on traditional microscopes. This stage will accommodate two slides at once, for faster scanning and comparisons. Adjustable friction can be set for lighter or firmer coarse focusing, eliminating stage drift.

Ergonomics

Its ergonomic, durable design ensures comfort and dependability for hours of daily use. The narrow front and low controls allow for arms and hands to rest flat on the table, reducing arm and shoulder strain. The rubber feet and wide rear footprint keep the microscope stable and reduce vibration for steady viewing. The built-in cord wrap keeps the lab counter neat, and the handle in the neck makes the Innovation easy to move and store.



ILLUMINATION

LED

The bright, white, uniform LED illumination maintains constant daylight-color, showing stained specimens in their true vibrant colors. With variable intensity, it is more than bright enough for routine brightfield microscopy and also well suited for applications such as phase contrast and darkfield. The LED bulb lasts approximately 50,000 hours, which could be up to 20 years under normal clinical use. The bulb generates very little heat as opposed to the traditional halogen models, and it uses a tenth of the energy. Save money on both reduced energy costs and bulb replacements.



Condenser

The ABBE condenser is easily aligned within its holder using the two alignment thumbscrews, ensuring a centered field of light. Calibrated indicator marks help the user set the sub-stage iris diaphragm to the perfect numerical aperture to match each objective for the best resolution. The additional Kohler iris on the base can be closed to reduce stray light and improve clarity.



ORDERING OPTIONS



Phase Contrast Kit



Simple Polarization Kit



Dark Field Condenser



Hard Carry Case



50x Infinity Oil Objective



60x Infinity Dry Objective



Eyepiece with Reticle
INE-1022-WRET



MiniVID WiFi
MVC-U5MP-WiFi



MiniVID USB
MVC-U6MP-USB3

Microscope Configurations:

INM-B04A-IPL3	Innovation Infinity Labscope, Plan, Binocular, 4 Objectives 4x-10x-40x-100x, LED Illumination
INM-T04A-IPL3	Innovation Infinity Labscope, Plan, Trinocular, 4 Objectives 4x-10x-40x-100x, LED Illumination
INM-B05A-IPL3	Innovation Infinity Labscope, Plan, Binocular, 5 Objectives 4x-10x-20x-40x-100x, LED Illumination
INM-T05A-IPL3	Innovation Infinity Labscope, Plan, Trinocular, 5 Objectives 4x-10x-20x-40x-100x, LED Illumination
INS-T4BV-IPL3	Innovation Infinity Labscope, Plan, Trinocular, 4 Objectives 4x-10x-40x-100x, LED Illumination w/ BioVIEW
INS-EPB4-IPL3	Innovation Infinity Labscope, Plan, Binocular, 4 Objectives 4x-10x-40x-100x, LED Illumination w/ Lumin
INS-EPT4-IPL3	Innovation Infinity Labscope, Plan, Trinocular, 4 Objectives 4x-10x-40x-100x, LED Illumination w/ Lumin

Accessories for Specialized Applications:

INP-PHST-20BF	Phase Contrast Kit for viewing live unstained specimens such as sperm
INP-POL7-7777	Simple Polarization Kit for viewing urine crystals
INP-CND7-DFOL	Dark Field Condenser for viewing live unstained tissues and cells
INP-CSE7-HDLK	Hard Carry Case custom cut for safe microscope transport into the field
MSO-050X-IPOL	50x infinity oil objective - highly recommended
MSO-060X-IPDR	60x infinity dry objective
INE-1022-WRET	Eyepiece with reticle

Cameras – choose from HDMI, WiFi, or USB cameras from LW Scientific for teaching and documenting cases.

SPECIFICATIONS

The Innovation microscope is equipped to ease the burden on the busiest and most discriminating lab technicians and specialists.

Powerful performance, crisp clarity, and rugged construction, backed by a lifetime warranty on optical and mechanical components, make the Innovation a valued addition to any laboratory.

HEAD

Binocular (Seidentopf), Trinoc available
Digital cameras available
Diopter adjustment +/-5 (built into each eyepieces)
Inclined 30°, rotates 360°
10X/22 Super WF HP eyepieces
(15X/16 eyepieces available)
30mm eyetube
Interpupillary distance range 50-75mm

NOSE PIECE

Reverse quadruple / quintuple nosepiece
Multiple ball bearing mounted

OBJECTIVES

Infinity High Contrast Plan objectives
Choose from 4- or 5-hole nosepiece
4X, 10X, 40XR, 100XR (oil) with the 4-hole nosepiece
4X, 10X, 20X, 40XR, 100XR (oil) with the 5-hole nosepiece
50X (oil) and 60X dry objectives are also available
Anti-fungal, parfocal, parcentric, color-coded

STAGE

Double Layer Mechanical Stage (216mm X 150mm)
Graphite-Coated Surface
Coaxial drive controls, rackless
Range of traverse: 75mm x 55mm
Slow-close hydraulic slide finger

FOCUS

Coarse adjustment: range of 18mm
Fine adjustment: graduation of 0.001mm
Tension control knob

ILLUMINATION

Movable Abbe condenser, NA 1.25
Iris Diaphragm
LED provides 50,000 hours of light and consistent,
even brightness
Variable light adjustment
Simple Kohler illumination
90-240V / 50-60Hz automatic-switching power input

OPTIONS

Phase contrast, Darkfield condenser (dry), Simple polarizer, WF 16X/15mm eyepieces

WEIGHT AND DIMENSIONS

Height: 16 in (406 mm)
Length: 15 in (381 mm)
Width: 8.5 in (216 mm)
Weight: 14.2 lbs (6.4 kg)

PACKAGING

21 lbs (9.5 kg)
21 in x 16 in 13 in (533 mm x 406 mm x 330mm)

HARD CARRY CASE

15 lbs (6.8 kg)
22 in x 18 in 12 in (559 mm x 457 mm x 305mm)

LW Scientific

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Get it from your authorized distributor: www.labequip.com Labequip ask@labequip.com