

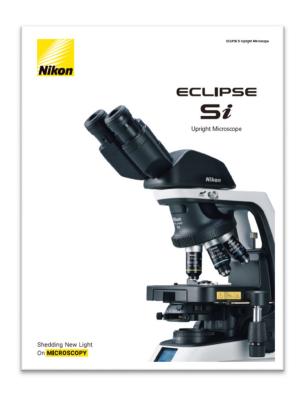
NUMBER: NP21-001 SUBJECT: Eclipse Si Biological Microscope

DATE: February 16, 2021 - Introduction -

## INTRODUCING THE ECLIPSE SI BIOLOGICAL MICROSCOPE

Nikon is pleased to introduce its latest Biological microscope, the *Eclipse Si*, which stands for "Screening Microscope" and "Senior Educational Microscope". This dual market naming matches the microscopes ergonomic design features that reduce strain on your eyes, shoulders, neck, arms and lower back for professionals who spend many hours using a microscope for slide screening like Pathologist and Cytologists while providing five observational methods (BF, DF, Phase, Simple Pol, and Dia Fluorescence) making it an excellent tool for advanced microscope users in the Educational field.

Adding a **DS1000** or **DS-Fi3** Camera with a tablet PC and NIS Elements L installed, images can be shared with other PC's and Smart Devices via a network for easy observation by colleagues on-site or remotely. With the Eclipse Si microscope, you can Focus in Comfort, and find Comfort in Focus.



Nikon is confident you'll find many users in basic Clinical fields of Histology, Dentistry, Nursing, Lab Technicians and Veterinary Labs along with Educational fields in Higher Education, Research and Teaching Labs that will find this microscope not only easy to use and comfortable to sit under for long hours but technically capable of meeting their imaging expectations.

## Si Microscope Key Features:

- LED Illumination system incorporating Nikon's fly-eye lens design to achieve uniform brightness across the entire FOV
- LIM (Light Intensity Management) system that incorporates the following features:
  - Automatically sets the brightness levels for each objective to the brightness levels established by the user
  - ECO Mode: Automatically turns off the LED illuminator and powers down the microscope after a period of inactivity programmed by the user
  - Display shows the current nosepiece address, objective mag, the brightness level,
     LIM brightness control, and ECO mode status
- Reduced repetitive motion during long hours of slide observations by use of the LIM system
  that automatically adjusts the illumination brightness when changing objective mags and
  keeping users focused on their task by not having to move their hands to readjust the
  brightness each time objective magnifications are changed
- Sleep energy saving mode button turns off the LED illuminator while maintaining power to the LIM so settings are retained when the microscope is reactivated
- Built-in Field Diaphragm for Kohler Illumination
- Nosepiece accommodation for 5 objectives
- Dedicated CFI E Plan Acromat objectives with 20mm FOV including a new 60x E Plan Acromat objective
- 22mm image FOV capability when combined with F22 optical components (CFI-60 objectives, Ci series tube lenses and CFI 10x/22 eyepieces)
- Four observational methods in additional to Bright-Field Illumination are available with the use of accessory items:
  - Phase Contrast Observation
  - Dark-Field Observation
  - Simple Polarization Observation
  - Diascopic Fluorescence Observation
- Recessed secondary Eyepiece Tube screw prevents the head from detaching from main body
- Captive primary Eyepiece Tube screw for securing the head during use and storage
- Ergonomically designed 45 degree eyepiece tube lens angle compared to the E200's 30 degree eyepiece tube lens angle
- Ergonomically located stage height which is about 50mm lower than the E200 stage height
- Ergonomically positioned course/fine focus knobs located on both sides of the microscope.
- Stage x-direction movement changed to a belt drive system making it safer and less obstructive to manipulate glass slides on the stage by eliminating the stage protrusion which exists with an x-direction rack and pinion system.
- Stage height focus limit knob for setting the stage upper travel to the point of best focus
  when observing samples under high mag and preventing the stage from going any higher
  which could cause glass slides to come into contact with the objective
- Intermediate modules include Eye-level Risers, Face-to-Face and Side-By-Side Teaching units
- Integrated AC adapter storage space with provision to store the power cord without having to unplug it from the AC adapter.
- Reduced weight and multiple carry points for easier lifting, carrying and moving from storage shelves to workspace

E200/Si Comparison Chart

E200/Si Compa Function	E200	Si
Optical	CFI60 Infinity corrected optical system	CFI60 Infinity corrected optical system
System Observation	or roo mining corrected option system	
Method	BF / PH / DF/ Simple POL	BF / PH / DF/ Simple POL/Dia FL
Nosepiece	4 hole (reversed)	5 hole (reversed- position detection)
Focusing Mechanism	Coaxial Coarse/Fine Focusing, Right fine, Left coarse/fine, Focusing stroke: 26.5mm, Coarse: 37.7 mm/rotation, Fine: 0.2mm/rotation, Coarse motion torque adjustable, Refocusing function (includes self-restoring stage height after pushing down stage)	Coaxial Coarse/Fine Both Sides, Z stroke 15mm (Up 2mm. Down 13mm), Coarse: 37.7mm/rotation, Fine: 0.2mm/rotation, Coarse motion torque adjustable
Re-aiming	One-touch refocus	Upper limit stopper
Stage	Rackless XY, Stage Size: Width 222mm x Depth 144mm, Cross travel movement: (X) 78mm x (Y) 54mm, Vernier scale, Two Slide Holder	Rackless XY, Stage Size: Width 182mm x Depth 114mm, Cross travel movement: (X) 78mm x (Y) 52mm, Vernier Scale, Two Slide Holder
Low Stage	No (191mm)	Yes (135mm)
Transmitted Lighting	Halogen /LED fly-eye lens	LED fly-eye lens
Tine-delay Shut-off	No	Yes (User Selected)
Light Manager	No	Yes
Fluorescence Illumination	2 Cube Epi-Fl illuminator option	Dia-FL - Blue Excitation
Condenser	1.25NA Abbe, 1.25NA Abbe Phase Contrast - accepts PH/DF slider	1.25NA Abbe for BF, Phase, DF or Dia FL Sliders
Objective Lenses	Plan Achro 4x, 10x, 40x (Dry Set) Plan Achro 4x, 10x, 40x 100x 60x Optional All CFI60 Objectives	Plan Achro 4x, 10x, 40x 100x, 60x Optional All CFI60 Objectives
Binocular Head	30 Degree inclination, interpupiliary Distance 47-75mm	45 Degree inclination, interpupiliary Distance 50-75mm
Tinocular Head	0/100 - 100/0 Light Split, 30 Degree Inclination, interpupiliary Distance 47-75mm	50/50 Fixed Light Split, 45 Degree Inclination, interpupiliary Distance 50-75mm
Eyepoint	411mm	401mm
Eyepiece	10x/20mm FOV with Diopter Adjustment	10x/20mm FOV with Diopter Adjustment
Camera Wi-fi camera	Attach to Trinoc No	Attach to Trinoc No
Dimensions (head facing back)	H 414.6mm x W 226.8mm x D 381.7mm (head forward)	H 401mm x W 236mm x D 280mm
Mass (approximate)	7.3kg Bino	6.0kg
Handle	Grip back arm only	Front, left, right side of bottom part of main body base.  Upper part of main body arm.
Cord storage	Optional Cord Hanger	Wrapping around rear AC adapter basket
Anti-mold	Yes	Yes
Anti-theft	No	No
Field Diaphragm	Optional Field Lens Diaphragm	Fixed Field Lens Diaphragm

Objective Sets	Eyepiece Tubes	Mechanical Stages	Package Sets	Package set Contents
Dry Objective Set*1	Binocular	Right Hand Stage Handle	MCA77201	Si Main Body, Stage, Eyepiece Tube, 10x Eyepieces(x2), Dry Objective set, Nosepiece(5-position), Nosepiece objective thread cap, Instruction Manual, Vinyl Cover (Type 119), 3mm Hex Wrench, AC Adapter. NOTE: Power cord sold separately*3
		Left Hand Stage Handle	Special order <sup>*4</sup>	
	Tri- Nocular	Right Hand Stage Handle	MCA77202	
		Left Hand Stage Handle	Special order <sup>*4</sup>	
Oil Objective Set*2	Binocular	Right Hand Stage Handle	90457	Same components as above except
		Left Hand Stage Handle	Special order*4	the Oil Objective Set replaces the Dry Objective Set NOTE: Power cord sold separately*3
	Tri- Nocular	Right Hand Stage Handle	90458	
		Left Hand Stage Handle	Special order <sup>*4</sup>	

<sup>\*1</sup>NOTE: Dry objective sets consists of CFI E Plan Achromat 4x, 10x, 40x objectives

## Si Microscope Packages and Component Price

Material No.	Description	
MCA77201	ECLIPSE SI R STG BINOC-DRY OBJ SET	
MCA77202	ECLIPSE SI R STG HNDL TRINOC-DRY OBJ SET	
90457	ECLIPSE SI R STG BINOC-OIL OBJ SET	
90458	ECLIPSE SI R STG HNDL TRINOC-OIL OBJ SET	
MCA77200	ECLIPSE SI R STG HNDL MAIN BODY*1	
MCB74200	EC-T-TB2 BINOCULAR TUBE 2	
MCB75200	EC-T-TF TRINOCULAR TUBE F2	
MCB75300	EC-ER EYE LEVEL RISER-25MM	
MCN77100	E2-F-BF BLUE LIGHT BLOCKING/CUT FILTER	
MCN77200	E2-F-FL DIA-FLUORESCENCE FILTER SET	
MDN11930	E2-DP DIA POLARIZER	
MRP70600	CFI E PLAN ACHROMAT 60X OBJECTIVE	
MWW40139	DF OBLIQUE ILLUMINATION SLIDER E2-SDF	
Recommended Right Angle power cord for Ei Microscope		

79036\*2 POWER CORD R ANGLE (LEAD FREE UL LISTED)

\*1NOTE: Si R Main Body comes with a Right Hand Stage, 10x Eyepieces(x2), Nosepiece(5-position), Nosepiece objective thread cap, Instruction Manual, Vinyl Cover (Type 119), 3mm Hex Wrench, AC Adapter. NOTE: Power cord sold separately\*2

\*2NOTE: Right angle power cord 79036 (opposed to 79035) fits best with the AC Adapter in the Si microscopes

storage space.

NOTE: Left Hand Stage Main Body is available by Special Order. Contact NII-HQ for pricing and p/n

**Si Web-Site URL:** <a href="https://www.microscope.healthcare.nikon.com/products/upright-microscopes/eclipse-si/">https://www.microscope.healthcare.nikon.com/products/upright-microscopes/eclipse-si/</a>

- · Contains download link for the brochure
- Contains QR code for accessing the Online Guide
- Contains the direct link for accessing the Online Guide: <a href="https://www.microscope.healthcare.nikon.com/guides/si/en/">https://www.microscope.healthcare.nikon.com/guides/si/en/</a>

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<sup>\*2</sup>NOTE: Oil objective sets consists of CFI E Plan Achromat 4x, 10x, 40x and 100x oil objectives

<sup>\*3</sup>NOTE: Right angle power cord 79036 (opposed to 79035) fits best with the AC Adapter in the Si microscopes storage space.

<sup>\*4</sup>NOTE: Left Hand Stage Handle Packages are available by Special Order.