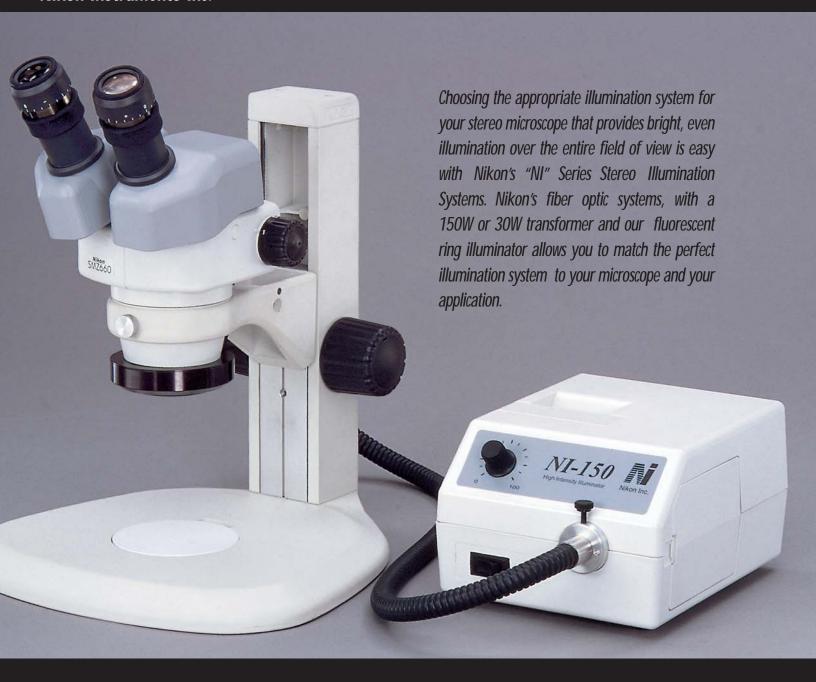


"NI" Series Illumination Systems

Nikon Instruments Inc.











• NI-150: 150 Watts of High Intensity Fiber Optic Episcopic Illumination

The NI-150 is the microscopy illuminator the industry has been waiting for. Every aspect of the NI-150 was built with the microscope user in mind. This 150 watt wonder delivers 350,000 foot candles of high-intensity, cold light illumination with a lamp life of over 1,000 hours. The NI-150 is available in 115V and 230V and is UL, CE and c-UL approved. A wide variety of accessories are available, including single and dual gooseneck light pipes, ringlights, a diascopic adapter for the Nikon C-DS Diascopic Stand, focusing lenses and filters. It features a 0-100% intensity control knob and a sleek, modern design with a handle built into the housing. A convenient side door makes changing lamps fast and easy, while audible noise and vibration is minimal.





• NI-30: Fiber Optic Illuminator

Sophisticated yet affordable, the NI-30 offers the value-conscious buyer many of the features found in the NI-150. The rugged, convection-cooled enclosure eliminates all noise and vibration for those users with tight workspaces and/or critical applications. The NI-30 is a 30 watt quartz halogen unit that comes standard with a single fiber optic gooseneck light pipe and delivers 10,000 foot candles of intense, cold illumination. Dual gooseneck light pipes and ringlights are also available. Incorporating the NI-150's most popular features, the NI-30 is a well-designed economical illuminator.

Fiber Light Guides and Accessories

A variety of optional accessories are available for both the NI-150 and NI-30, including dual and single fiber optic gooseneck light pipes, fiber optic ringlights, focusing lenses, and filters. As an additional option to the 20V Lamphouse for the 83311 C-Diascopic Stand, Nikon offers a fiber optic cable and adapter to allow the use of the NI-150 illuminator for bright, even 150W diascopic illumination.



Fiber Optic Ringlight Compatibility	Ringlight A	Ringlight B
SMZ-645/660 w/o Auxiliary Lens:	√	
With 83340 0.5x:	√	
All other auxiliary lenses (except 83344 ERGO Lens)		√
SMZ-800 With all SMZ-800 (P) Objective (except 83466 ERGO Lens)	√	
SMZ-1000 With all SMZ-1000 (P) Objectives (except 83473 P-ED Plan APO 2x)	√	
With 83473 P-ED Plan APO 2x		√
SMZ-1500 All SMZ-1500 HR Objectives (except 83482 1.6x Lens)	√	
SMZ-U With all SMZ-U Lenses (except 83064 2.0x ED)	✓	
With SMZ-U 83064 2.0x ED		√

Standard Features of the Hi-Performance NI-150 Light Source:

- · Side door provides easy access to lamp and heat filter
- Sleek housing design substantially reduces audible noise and vibrations
- · Unit is cool to the touch
- Continuous 0-100% intensity control provides full variation in brightness

Standard Features of the Economical NI-30 Light Source

- · Side door provides easy access to lamp
- · Convection-cooled, for zero noise, zero vibration
- On/Off switch

Both of These Exceptional Light Sources Share Many of the Same Features

- Small footprint fits in tight spaces
- · Built-in handle stays out of the way
- · Minimal light leakage for photo-sensitive applications
- Available in 115 or 230 VAC 50/60 Hz for worldwide applications
- · UL, CE and c-UL approved for global use
- 10 year warranty

Technical Information:

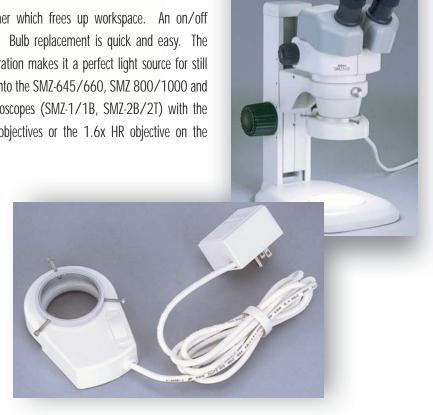
	NI-150	NI-30			
Lamp:	EKE, 21 Volt, 150 Watt	EKZ 10.8 Volt, 30 Watt			
Voltage:	115 VAC, 50/60 Hz	115 VAC, 50/60 Hz			
	230 VAC, 50/60 Hz	230 VAC, 50/60 Hz			
Color Temperature:	3250 ⁰ K with EKE Lamp	3250 ⁰ K with EKZ Lamp			
Intensity Control:	0-100%				
Fuse (115V):	3A 5 x 20mm slow blow	0.5A 5 x 20mm 250V slow blow			
Fuse (230V):	2A 5 x 20mm slow slow	0.5A 5 x 20mm 250V slow blow			
Noise Level:	<24dB	0.0			
Safety Approvals:	UL, CE, c-UL	UL, CE, c-UL			
Dimensions:	6.0" (l) x 8.5"(w) x 5.3(h)	6.0" (l) x 8.5"(w) x 5.3(h)			
	152mm(l) x 216mm(w) x 135mm(h)	152mm(l) x 216mm(w) x 135mm(h)			
Weight:	7.75 lbs (3.5kg)	7.75 lbs (3.5kg)			

• Fluorescent Ringlight

This high efficiency, compact ringlight has a built-in transformer which frees up workspace. An on/off intensity switch is conveniently loacted at the user's fingertips. Bulb replacement is quick and easy. The hi-frequency electronic ballast and non-flickering fluorescent operation makes it a perfect light source for still photography and CCTV. The Fluorescent Ringlight will fit directly onto the SMZ-645/660, SMZ 800/1000 and SMZ-1500 and can also be used with the old style stereomicroscopes (SMZ-1/1B, SMZ-2B/2T) with the 83317 Ringlight Adapter (it cannot be used with the ERGO objectives or the 1.6x HR objective on the SMZ-1500).

Fluorescent Ringlight Features:

- Instant Start No ballast humming
- Unique eye-easing phosphor
- Control (High & Low Positions) Intensity
- Hand formed full spectrum white bulbs for even illumination
- Cooler bulbs for longer life, increased lumen output
- Energy efficient lower wattage, grounded cord set for added safety



PRODUCT INFORMATION

All of our illumination systems are an excellent compliment to Nikon's SMZ series of stereomicroscopes:

SMZ-645/660 Greenough stereomicroscopes

- 6.3:1 zoom ratio
- 45° and 60° eyepiece inclination respectively
- Airtight, anti-mold, anti-electrostatic
- Plain, diascopic, and boom stands available
- Many ergonomic features
- SMZ-660 is a popular choice for many OEM applications

SMZ-1500 and SMZ-1000/800 parallel stereomicroscopes

- 15:1 zoom ratio SMZ-1500
- 10:1 zoom ratio SMZ-1000
- 6.3:1 zoom ratio SMZ-800
- Standard, low eyelevel and tilting binocular body tubes
- Single and dual port Beam Splitters (allows the use of a variety of photographic systems)
- Superior optics
- Plan Achromats, Plan Apochromats and ED Plan objectives for $\ensuremath{\mathsf{SMZ-1000/800}}$
 - HR (high resolution) Plan APO objectives for SMZ-1500
- Unsurpassed performance

Main Units

83365	C-NI-150 Light Source w/ Heat Filter 115V
83384	C-NI-150 Light Source w/ Heat Filter 230V
83385	C-NI-30 Light Source, 115V w/ Single Gooseneck
83368	C-NI-30 Light Source, 230V w/ Single Gooseneck
83360	C-Fluorescent Ringlight

Accessories

83369	C-Fiber Adapter and Cable for C-DS Diascopic Stand
83371	C-Dual Gooseneck Light Pipes Diascopic Stand
83372	C-Single Gooseneck Light Pipes
83373	C-Focusing Lens
83374	C-Ringlight A
83375	C-Ringlight B
83376	C-Heat Filter
83377	C-Daylight Correction Filter
83378	C-Filter Holder
83361	C-Replacement Ringlight for Fluorescent Ringlight
83317	C-O A Ringlight Adapter

Other lighting accessories for stereomicroscopes available from Nikon include:

OCC (Oblique Coherent Contrast) Transmitted Light Stand

· Allows colorless and transparent samples to be observed in high relief

Brightfield/Darkfield Transmitted Light Stand

· Seven sided torodial darkfield mirror reduces stray light and increases contrast

Coaxial Reflected Light Illuminator

- For Nikon parallel design stereomicroscopes
- Excellent for highly reflective items such as polished metals and microelectronics

Fluorescence Illuminator

- For Nikon parallel design stereomicroscopes, this illuminator features a four-position filter slider
- Can be used for studying live specimens, as well as industrial samples such as observing residual photo-resist.

