



42X-540X MICROSCOPE INSPECTION SYSTEM

Features

- Zoom Optics with Modular Optical Components
 - 84X-540X
 - 42X-270X
- Long Working Distance
 - 108mm (4.25") @ 540X
 - 189mm (7.4") @ 270X
- USB 2.0 Interface
 - No Framegrabber required
 - Single Cable Interface
- Low Noise
- Progressive Scan 1.3 Megapixel
- Full Color Preview Window
- RGB Data Capture
 - 30-bit Color depth - 1024 levels
- Software Compatible with:
 - Windows XP
 - Windows 2000

Benefits

- Long working distance allows for flexibility with fixtures.
- Resolve 1 micron features.
- Compatible with all J microTechnology, Inc. probe stations.
- Camera control through an intuitive user TWAIN interface results in rapid image capture, archiving and documentation, still and video, for high throughput applications, demanding research environments and teaching facilities.

Description

J microTechnology, Inc offers the NAT-31 Microscope Inspection System. This system is based on high clarity zoom optics and an USB 2.0 digital camera. It is designed to be a cost-effective, versatile solution for clinical, life science, materials science, semiconductor and educational professionals. The zoom optics have a 0.7X-4.5X objective lens, 2X relay lens and a 0.5X or 1.0X objective multiplier. With 1280x1024 resolution and on-board processing, the USB 2.0 Camera delivers outstanding image quality with down to 0.5 micron resolution per pixel for a wide variety of scientific applications attached to J microTechnology probing systems. Live video preview provides for real-time focus.

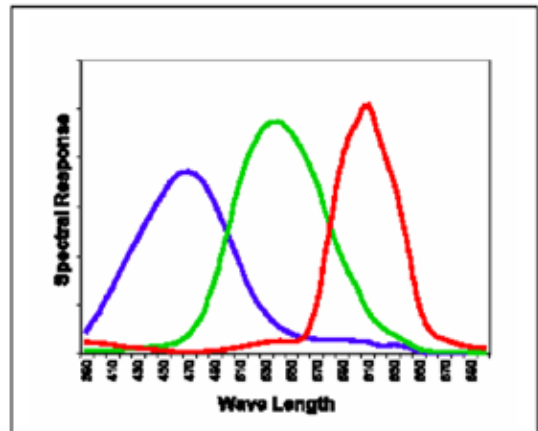
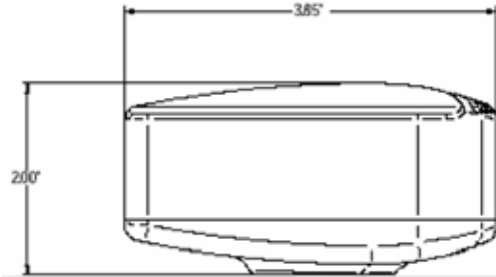
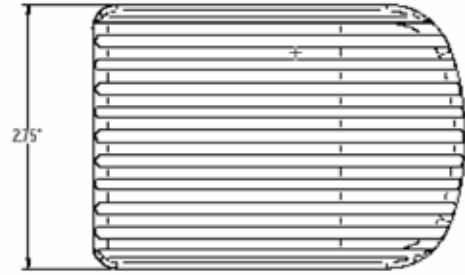
Auto exposure and auto white balance efficiently captures your optimal image. An intuitive user application provides camera controls, while full integration to popular third-party imaging applications is available through our TWAIN drivers. The USB 2.0 digital interface ensures a simple plug and play installation - and one standard cable minimizes camera and cable clutter. No frame grabber card is required.



NAT-31

Camera Sensor	
Image Sensor	1/2" CMOS format, color or monochrome, 6.5mmx5.3mm array
Effective Pixels	1280x1024, 5.2um square pixels
Frame Rate	15 fps at 1280x1024, 60 fps at 640x480
Dynamic Range	>60dB
Digital Output	8 and 10-bit uncompressed
Read Noise	20 e- rms

Camera Controls	
Mass	300g
Power Requirement	USB bus power, or external 5VDC - 500mA
Power Consumption	-2.5Watts
Operating Temperature	0. C to +50. C
Operating Humidity	5%-95%, Non-condensing
Integration Time	1/1000 to 3 sec.
Shutter	Rolling shutter with single frame capture
ROI	User Selectable
Auto Exposure	Automatic / Manual
White Balance	Automatic / Manual
Gain	Programmable /1 to 10X optimizable
Interface Connector	USB 2.0 high-speed interface
Dimensions (L x W x H)	3.85 x 2.00 x 2.75 inches
Lens Mount	C-Mount lens adapter



Application	Auxiliary Lens	Performance
Probe Placement DUT alignment	0.5X	Mag: 42X-270X FOV: 8.6-1.33 mm WD: 189 mm (7.4")
Inspection Fine Geometry Probing	1X	Mag: 84X-540X FOV: 4.3-0.66 mm WD: 108 mm (4.25")

Ordering Information

NAT-31

- USB Camera Microscope Inspection System
- 0.7X-4.5X Zoom Lens
- 2X Coupler Lens
- 0.5X Auxiliary Lens
- Adapter Bracket
- Articulating Microscope Stand
- NAT-30A, USB Camera
- Flourescent light ring
- Storage Case

Options:



JmicroTechnology
 3744 NW Bluegrass Place
 Portland, OR 97229-7068
 (503) 614-9509 [voice]
 (503) 531-9325 [fax]