Virtual microscopy for virtually everyone.
The freedoms of virtual microscopy are now right at your fingertips – at a price clearly within reach. COOLSCOPE VS™ is a totally self-contained digital microscope that lets you quickly view high-resolution images of specimen slides on a computer monitor or remotely via network. Then, with the help of its groundbreaking software suite COOLSCOPE VS lets you effortlessly produce, archive, and share those images through a computer to an intranet or over the Internet.

The combination of a high-precision Nikon optical microscope, a high-resolution Nikon digital camera, and Bacus Laboratories’ renowned WebSlide® Software, COOLSCOPE VS delivers a powerful, easy-to-use virtual microscopy system that requires minimal setup and runs on your desktop or laptop computer. By replacing traditional eyepieces with a computer monitor, COOLSCOPE VS instantly upgrades the ergonomic comfort of your workplace without sacrificing the image quality of your preparations.

Transcending traditional microscopy.

COOLSCOPE VS offers the power, versatility and ease-of-operation to open up a world of new possibilities for all microscope users. Pathologists can now engage in high-quality remote collaboration and consultation with colleagues the world over. Clinical research professionals can use the COOLSCOPE VS Software Suite as an archiving virtual slide tray to store slide specimens on a network or local drive for easy retrieval and viewing.

COOLSCOPE VS is an ideal educational tool. Students can remotely control the microscope over the Internet and simultaneously view the same slide specimen with teachers and other students. Instructors can have a comprehensive image library at the ready and can create CD-ROM or DVD teaching sets for easy and continual access.
Welcome to virtual microscopy.
COOLSOCPE VS: Virtually effortless.

**Capture.**

With just a few simple mouse clicks, COOLSOCPE VS’ WebSlide Software lets you capture and transform your complete specimen or a portion you designate into a virtual slide with the quality and resolution similar to the original glass slide viewed on a traditional microscope.

**View.**

With the help of COOLSOCPE VS’ WebSlide Browser®, navigation and observation of specimens and virtual slide images on a computer monitor are easy and intuitive. By providing mouse-enabled control of all the tools needed to conduct precise observations, the WebSlide Browser offers the same functionality as a conventional microscope. The user can fully concentrate on work that demands undivided attention — interpreting and recording the precise details of the specimen.

Once a glass slide preparation is inserted into the tray, the intuitive interface puts all microscope operations at your fingertips.

The software allows you to browse unlimited collections of virtual slides on your local computer.
The powerful COOLSCOPE VS Software Suite offers all the tools you need to add productivity and accessibility to virtual slides.

**Share.**

COOLSCOPE VS delivers the promise of networked technology, and lets you easily share virtual slides with colleagues or students both near and far over an intranet or the Internet. The COOLSCOPE VS Software Suite allows colleagues to remotely control their observations of your slide through a standard Web browser, making real-time, collaborative consultation more efficient than ever before.

**Archive.**

When it comes to storing virtual slide images for easy retrieval and examination, COOLSCOPE VS delivers the most powerful solution ever created. The software package includes a personal server, WebSlide VS Server LE®, to provide online access and archiving of high-resolution virtual slides. For situations that require the simultaneous viewing of virtual slides by multiple users — such as education or long-distance collaboration — the COOLSCOPE VS server offers maximum functionality without compromised image quality.

With just a few mouse clicks, COOLSCOPE VS digitizes the specimen in its entirety — or a portion you designate — creating high-resolution virtual slides that can be shared through the included server software.
As the world’s first fully digital, completely automated microscope system, COOLSCOPE VS combines Nikon’s high-precision microscope optics and 5-megapixel digital camera in a single, mouse-enabled unit. The result is an incredibly versatile microscope that delivers a wide range of brightfield image options from low-power, whole specimens to high-resolution, sub-scanned regions, to full-specimen scans at 40x. Yet for all its power, COOLSCOPE VS is remarkably simple to set up and use.

By eliminating traditional eyepieces and complex controls, COOLSCOPE VS operates much like a computer: you power-up and insert glass slides in a CPU-like tower, observe high-resolution SXGA images through a monitor, and control every microscope function with a mouse. Plus, the unit’s intelligent design means that aperture, brightness adjustment, motorized stage movement, focusing, and magnification changeover are all fully automated.

**Play it cool.**

Thanks to COOLSCOPE VS’ exclusive LED illumination, your observations benefit from bright, uniform, and cool illumination at a constant color temperature. LED illumination also dramatically minimizes heat generation, resulting in stable operating conditions and longer service life.
One of COOLSCOPE VS’ unique features is its ability to provide instant remote viewing and microscope control through any standard Internet browser.

- View the entire specimen or move to a specific point
- Change magnifications
- Autofocus/focus adjustment
- Brightness adjustment
- Download images
- Ideal for remote consultation or distance learning

COOLSCOPE VS opens the door to virtual microscopy when networked to a computer running the COOLSCOPE VS Software Suite.
The real power behind virtual slide microscopy.

When it comes to operations, COOLSCOPE VS offers two options. The first allows COOLSCOPE VS to work as a stand-alone component, with specimen observations easily conducted and controlled via monitor through the unit’s built-in interface.

More importantly, COOLSCOPE VS also comes bundled with the COOLSCOPE VS Software Suite — a powerful, easy-to-use software package from Bacus Laboratories that delivers all the image-managing benefits of virtual microscopy. At the heart of the COOLSCOPE VS Software Suite are WebSlide VS®, WebSlide VS Browser®, WebSlide VS Server LE®, and the SlideTray® — all designed to make your transition into virtual microscopy intuitive and stress free.

The COOLSCOPE VS Software Suite: Four-part harmony.

With the COOLSCOPE VS Software Suite loaded on your PC, you can take advantage of a set of robust virtual microscopy tools. The Suite includes:

**WebSlide VS®**

The WebSlide VS is the interface between your PC and COOLSCOPE VS. It allows you to control COOLSCOPE VS directly from your PC, so you can effortlessly create virtual slides. WebSlide VS also stores virtual slides on your PC for use and access through the WebSlide Server LE, another powerful element of the COOLSCOPE VS Software Suite.

**WebSlide VS Browser®**

The WebSlide VS Browser provides the functionality needed to conduct sophisticated observations of virtual slide images. It transforms your PC into an extremely powerful microscope, capable of presenting virtual slide images both locally and over an intranet or the Internet. Local viewing occurs with the help of the COOLSCOPE VS Software Suite’s Slide Tray, while networked observations take place in conjunction with the WebSlide VS Server LE.

The WebSlide VS window consists of a macro image of the entire slide with control options.

The WebSlide VS Browser includes everything needed to view, navigate, manipulate and annotate onto a virtual slide.
**WebSlide VS Server LE®**

The WebSlide VS Server LE is a personal desktop intranet/Internet server, designed to provide access to virtual slides created by the COOLSCOPE VS over a network. With a capacity to store and serve as many as 25 high-resolution images, the WebSlide VS Server LE provides for ActiveX and Java Net Viewers, allowing both PC and Mac® Internet browsers to view the images. The WebSlide VS Server LE allows multiple users to observe a synchronized view of a particular slide along with an interactive pointer and discussion window when viewing and communicating with the WebSlide Browser.

**SlideTray®**

Thanks to the COOLSCOPE VS Software Suite’s SlideTray software, virtual slides stay organized and easily accessible for local viewing through the WebSlide Browser. The SlideTray arranges virtual slides into a tree-structured, folder-based presentation to let you easily select slides for viewing.

The SlideTray arranges and organizes virtual slide collections for quick retrieval.

The WebSlide VS Server LE is an intranet/Internet-based software application optimized for the storing and sharing of virtual slides across a network.
Collaboration without limits.

For collaborative sessions such as Tumor Boards, scientific meetings and study groups, COOLSCOPE VS can be connected to a projector, providing an ideal way to observe and work with high-resolution specimen images in a conference setting.

Plus, by allowing virtual slides to be archived and accessed over a network, COOLSCOPE VS’ WebSlide Server lets the unit operate in much the same way as a multi-headed microscope. Only now, clinical and research professionals working on remote and second opinion collaborations need not be on the same continent, never mind in the same room; users simply access and view the virtual slide images from the comfort of their own Web-enabled PCs. From pathology and histology to education and distance learning, COOLSCOPE VS makes working together easier and more efficient than ever before.

**COOLSCOPE VS is ideal for:**

- **Pathology:** Simultaneous image viewing enables remote collaboration via network or the Web.

- **Education:** Virtual slides function as a multi-headed microscope, allowing students to operate the microscope and access virtual slides from the Internet anytime.

- **Research:** Powerful archiving capabilities store multiple slides on a network or computer hard drive.

- **Proficiency Testing:** Seamlessly combine multimedia, text, pictures, and HTML with virtual slides for the creation of self-executing custom proficiency tests.

Presentations are effortless when using the COOLSCOPE VS as a stand-alone system. Plus, remote users may join in via an intranet or over the Internet.
Whether used as a stand-alone unit or as a tool that allows scientific professionals and educators to share high-resolution specimen images over a network or the Internet, COOLSCOPE VS offers the easiest way to tap into the power of virtual slide technology.

By providing the best performance, highest image quality, greatest ease-of-use and the lowest cost per image, COOLSCOPE VS will forever change your expectations of a microscope. Look into COOLSCOPE VS – and get ready to believe your eyes.

About Nikon Instruments Inc.

Nikon Instruments Inc. is a global leader in the development of advanced optical technology. Its product line includes microscopy equipment, digital imaging, precision measuring and semiconductor wafer-handling equipment. Nikon is committed to providing technologically advanced instruments that offer optimal versatility, performance and productivity. Nikon combines state-of-the-art capabilities with innovative designs to produce optically superior, ergonomically friendly products for cutting-edge scientific research, medical and industrial applications.

About Bacus Laboratories, Inc.

Bacus Laboratories, Inc., located in the Chicago suburban area, pioneered virtual microscopy in the mid-1990s. The company, a leader and innovator in virtual microscopy, also has products for quantitative pathology and tissue microarray imaging. They are the leading provider of virtual microscopy as a replacement for glass slides and microscopes in medical education. The company, founded in 1994, has 10 US patents in Internet-based virtual microscopy and related digital imaging methods. Bacus Laboratories’ proprietary WebSlide virtual slide format, server software, and viewing software, provide cost effective solutions for digital microscopy.
Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>Samples observable</td>
<td>1 slide glass preparation (up to 1.7mm total thickness including slide glass and specimen)</td>
</tr>
<tr>
<td>Compatible slide glass</td>
<td>Up to 1.2mm in thickness, 26mm in width, 76mm in length (ISO 8037 compliant)</td>
</tr>
<tr>
<td>Compatible cover glass</td>
<td>Up to 0.17mm (No.1) or 0.18mm (No. 1.5) in thickness (ISO 8255 compliant)</td>
</tr>
<tr>
<td>Observation method</td>
<td>Transmitted brightfield</td>
</tr>
<tr>
<td>Observable area</td>
<td>Entire area of a slide glass preparation (26 x 76mm)</td>
</tr>
<tr>
<td>Image display mode</td>
<td>Macro (full slide glass preparation area) and Micro images (partial enlargement)</td>
</tr>
<tr>
<td>Optics</td>
<td>CF corrected infinity optics</td>
</tr>
<tr>
<td>Illumination</td>
<td>White LED</td>
</tr>
<tr>
<td>Focusing</td>
<td>Auto-focus and Manual</td>
</tr>
<tr>
<td>CCD</td>
<td>2/3-in. CCD (total number of pixels: 5.24-mega pixels; effective 5.07-mega pixels)</td>
</tr>
<tr>
<td>CCD sensitivity</td>
<td>2400 lx, f5.6 or greater (equivalent to ISO 260)</td>
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<tr>
<td>A/D conversion</td>
<td>12-bit</td>
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<tr>
<td>Magnification changeover (motorized)</td>
<td>On CCD, 5X, 10X, 20X, 40X (micro image)</td>
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<tr>
<td>Electronic zoom</td>
<td>During full-screen display: 1.4X, 2X, 2.8X, 4X, 16X (micro image)</td>
</tr>
<tr>
<td>Exposure control</td>
<td>Program AE with AE Lock</td>
</tr>
</tbody>
</table>

Dimensional Diagram

![Dimensional Diagram](image_url)

(Unit:mm)

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. January 2005. ©2005 NIKON INSTRUMENTS INC.

**WARNING**

TO ENSURE CORRECT USAGE, READ THE CORRESPONDING MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.

Monitor images are simulated.
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