NEW

OLYMPUS CORPORATION is ISO14001 certified.

OLYMPUS CORPORATION is FM553994/ISO9001 certified.

Illumination devices for microscope have suggested lifetimes. Periodic inspections are required. Please visit our web site for details.

This device is designed for use in industrial environments for the EMC performance (IEC61326-1 Class A device). Using it in a residential environment may affect other equipment in the environment.

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Images on the PC monitors are simulated.

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Not for clinical diagnostic use.
Advanced Medical Education and Collaboration

Remote Conferencing and Consultation

Enhanced Research Tool for Brightfield and Fluorescence

The VS120 allows multiple viewers to study virtual slide specimens simultaneously via simple server access, regardless of time and location — providing an ideal solution for medical instruction, Q&A session, tumor boards and remote collaboration.

Virtual slides can be archived to a database, enabling network-based remote retrieval at any time through the Olympus NIS-SQL NetImage Server. Images are stored at high resolution, and multiple clients can review and even synchronize elements such as specific observation areas to facilitate efficient review and discussion.

The VS120 not only creates high resolution brightfield images, but also can scan in full multi-fluorescence mode. Utilizing virtual microscopy for fluorescence imaging helps to minimize problems associated with damaging and fading of sensitive fluorescence samples.

An Ideal Choice for Today’s Digital Learning Environment and State-of-the-Art Research Facilities
Wide Range of Objectives from 2x to 100x
The VS120 comes standard with Olympus UPLSAPO 2x, 10x, 20x and 40x objectives, allowing the user to choose an objective most suitable for his or her research needs. Automatic specimen recognition capability limits scanning to the specimen area, with high-level color fidelity and image quality.

Virtual-Z, 3D Virtual Slide Production
Multi-plane virtual slides can be produced by specifying attributes such as depth for multiple areas, range, number of planes, and magnification. The Virtual-Z scanning function allows the user to change the depth of the image simply by scrolling a mouse, making it easy to focus through the depth at any region of interest. Such functionality is particularly advantageous for viewing thicker specimens such as cell clusters or cranial nerves.

Automation Enhances Laboratory Efficiency
An optional automated slide loader with a capacity to hold 100 slides adds efficiency to laboratories with high throughput requirements. Furthermore, specimen information can be automatically read using 1D and 2D barcode scanner, making it easier to store and organize information.

Supporting High-resolution, High-sensitivity Virtual Fluorescent Slides
High-speed filter wheels of the optional fluorescent unit can be installed on both the excitation and observation side, enabling the swift production of fluorescent virtual slides with high-level definition and resolution. Multi-colored virtual slides also can be prepared for long-term observation, negating concerns over fading, discoloration, and degradation.

An Innovative Synchronizing Feature Enables Comparative Viewing of the Same Sample Under Different Stains
Analysis of the multiple virtual slides prepared from the same specimen is made easy through the ability to align them on the monitor with positions and magnifications interlinked.

View Full and Magnified Images on the Same Screen
Both the whole slide and zoomed-in region can be displayed on the same screen, making it easy to pinpoint the specific location on the larger image.

Save Annotation Voice Data
An innovative annotation function allows the user to save and link text and voice data to specific regions of interest on the slide.
Batch Management of Digital Content

Offering functionality beyond virtual slides, the VS120 allows a wide range of image data to be archived to a database in both JPEG and TIFF formats, including macro images captured by other devices such as endoscopic images, X-ray images and electrocardiograms. Users are also able to save Microsoft Word, Excel and PowerPoint documents to the database.

Powerful and Fast Search Functionality
Virtual slides are easily found by using keywords through the folder tree. Simply double-clicking on the corresponding thumbnail image opens the desired virtual slide in a new window.

Attach Metadata to Virtual Slides
The VS120 provides editable metadata fields that can be used to store data such as tissue name, staining method, organ name, system, instructor's name and other keywords. Such information appended to slides, can assist greatly in an educational setting.

Example of a Virtual Slide Search
Select Instructor's Name
Click "Search" to Display a List of Thumbnails
Click the Target Image to Display Appended Information
Double-click the Target Image to Open the Virtual Slide

A Database Providing Simple Operation

Intended Specimen
- Glass slides with cover glass
- In thickness: 0.1-0.17 mm

Microscope Frame
- Brightfield Koehler illumination for transmitted light
- Objective Lenses: 2x, 10x, 20x, 40x with a motorized revolving nosepiece
- Motorized Stage: Motorized XY stage with automatic control
- Focusing: Motorized automatic control

Digital Camera
- CCD Camera: 3.45 µm x 3.45 µm pixel size, high sensitivity, high resolution

Loading System
- Scan
  - Scan Area: W 26 mm x H 64 mm (Slide glass size: W 26 mm x H 76 mm)
  - Resolution: Less than 0.33 µ/pixel when using 20x objective, less than 0.17 µ/pixel when using 40x objective

System Control
- OS: Compatible with Windows 7 32bit, Professional English version
- Network Interface: 100/1000 Mbps Ethernet
- Memory: 4 GB RAM
- Hard Disc Drive: 1.0 TB or more
- Display: 24" TFT wide monitor
- Software: Image format: vsi, JPEG, TIFF, scrolling/panning/zooming/rotating/automatic sample detection
  - Z stack extended focus imaging/camera capture/depot/electric zooming/synchronized multi-images display
  - automatic stitching/slide loader control consultation software (option)

Environment
- Weight: Approx. 52 kg (incl. controller and display)
- Operating Environment: Temperature: 15–28 degree centigrade, humidity: 30%–80% (non condensing)

Power
- Scanner: AC 100–120/220–240 V, 50/60 Hz, 3.5 A/1.5 A
- Controller: AC 100–120/220–240 V, 50/60 Hz, 10 A/6 A
- Display: AC 100–240V, 50/60 Hz, 1.5 A
- Slide loader: AC 100–120/220–240 V, 50/60 Hz, 0.9 A/0.5 A (VS120-L100 Only)

Power Consumption
- VS120-S1: 960 W
- VS120-S5: 960 W
- VS120-L100: 1030 W

Dimensions

<table>
<thead>
<tr>
<th>Specifications</th>
<th>VS120-S1</th>
<th>VS120-S5</th>
<th>VS120-L100</th>
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</thead>
<tbody>
<tr>
<td>Intended Specimen</td>
<td>Glass slides with cover glass</td>
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<tr>
<td>Width (mm)</td>
<td>25-30</td>
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<tr>
<td>Length (mm)</td>
<td>73-95</td>
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<tr>
<td>Thickness (mm)</td>
<td>0.1-0.17</td>
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Dimensions

Brightfield Observation Configuration (With 5-slide Storage Capacity)

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<tr>
<td>Width (mm)</td>
<td>305 x 271</td>
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<tr>
<td>Height (mm)</td>
<td>341 x 264</td>
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Brightfield Observation Configuration (With 100-slide Storage Capacity)

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<tr>
<td>Width (mm)</td>
<td>555 x 168</td>
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<tr>
<td>Height (mm)</td>
<td>450 x 525</td>
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