### Device control

<table>
<thead>
<tr>
<th>Camera</th>
<th>Dimensions</th>
<th>Standard</th>
<th>Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olympus DP20, DP21, DP2L, DP70, DP71, DP72</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Microscope BX51, BX51WI, BX51, SZX10A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Peripherals

- Olympus DSU, FCB
- Hamamatsu Camera Orca R3, C10600-10B, Orca 03 (C4844-03G), Orca 03 (C4844-05G)

### O-Imaging

- Camera MicroPublisher 3.3 RTV, MicroPublisher 5 RTV
- Excitation: RET100 (Er, SrY2000R, 2000Xc, 4000R4, 4000R) plus RGB slider

### Photometrics

- Camera CoolSNAP, RQ2
- Coolsnap

### Sales

- Camera ProgRes C3, ProgRes C5
- Photometrics Coolsnap

### UNCLE Associates

- Shutter Standa X-shutter (VCN, VNM, VNR, VRG, VRL)

### CoolED

- Light Source polarised (p1-2)

### EFD

- Light Source C-38 dust blower

### Siddar

- Light Source Lambda DG4

### Prior

- Motorized XY stage PicoScan 3, 400
- Shutter, Z-drive PicoScan 3, 400

### Lumi

- Motorized XY stage Mac 5000/6000
- Shutter, Z-drive Mac 5000/6000

### Objective Imaging

- Motorized XY stage Controller Oasis 4i
- Z-drive controller Oasis 4i

### Mahrühäuser

- Motorized XY stage Tango

### Compatible image formats

- Read and write VSI (Virtual slide image), JPEG, JPEG2000, TIFF, BMP, AVI, PNG

### System requirements

- OS Microsoft Windows Vista (32-bit) Ultimate with SP2
- Microsoft Windows Vista (32-bit) Business with SP2
- Microsoft Windows XP Professional (32-bit with SP3)
- Operating Language English
- CPU Intel Pentium 4, Intel Xeon, or Intel Core Duo (or equivalent)
- RAM Windows Vista: 3 GB or larger recommended (minimum 2 GB required)
- Windows XP: 2 GB recommended (minimum 1 GB required)
- Display 1280x1024 or larger recommended (1024 x 768 or larger), 32-bit color
- Port USB port for protection key
- Serial RS232/485 for hardware control (BX51, BX61L, SZX10V, MDCU, etc.)
- HDD 1 GB or more of free space at the time of installation
- Drive DVD-ROM drive
- Web Browser MS IE 6.0 or later

---

OLYMPUS CORPORATION is ISO14001 certified.
OLYMPUS CORPORATION is FM553994/ISO9001 certified.

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.
All other company and product names are registered trademarks and/or trademarks of their respective owners.

Images on the PC monitors are simulated.
Specifications and appearances are subject to change without any notice or obligation on the part of the manufacturer.

Imaging Software
cellSens

OLYMPUS CORPORATION
Your Vision, Your Future

OLYMPUS AUSTRALIA PTY LTD
390 Queen Street, Milton, Victoria 3064
www.olympus.com.au

OLYMPUS EUROPA HOLDING GMBH
Wendelsteinstraße 1
D-22525 Hamburg
www.olympus.com

OLYMPUS AMERICA INC.
1-800-772-OLYMPUS (1-800-772-6557)
4500 Hanes Mall Boulevard, P.O. Box 6098
Dual 4i, Z-drive controller

MicroPublisher 3.3 RTV, MicroPublisher 5 RTV

Mahrühäuser

Z-drive controller

Oasis 4i

Microsoft Windows Vista (32-bit) Ultimate with SP2
Microsoft Windows Vista (32-bit) Business with SP2
Microsoft Windows XP Professional (32-bit with SP3)

English

Intel Pentium 4, Intel Xeon, or Intel Core Duo (or equivalent)
Windows Vista: 3 GB or larger recommended (minimum 2 GB required)
Windows XP: 2 GB recommended (minimum 1024 MB required)

1280x1024 or larger recommended (1024 x 768 or larger), 32-bit color
USB port for protection key
Serial RS232/485 for hardware control (BX51, BX61L, SZX10V, MDCU, etc.)

1 GB or more of free space at the time of installation
DVD-ROM drive
MS IE 6.0 or later

OLYMPUS CORPORATION is ISO14001 certified.
OLYMPUS CORPORATION is FM553994/ISO9001 certified.

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.
All other company and product names are registered trademarks and/or trademarks of their respective owners.

Images on the PC monitors are simulated.
Specifications and appearances are subject to change without any notice or obligation on the part of the manufacturer.

Seamless Workflow. Intuitive Operation.
Adding Simplicity to Experiment Design... for More Streamlined Workflow... that Leaves More Time for Research

cellSens gives you a simpler way to work. Full control over the user interface assures that functions are where you want them, when you want them. This seamless operation from image capture to report creation means more results with less effort. Spend less time with your software. Enable more time for research.

Choosing cellSens Makes Good Sense!

It's so easy to use— even for a beginner!

I love the way I can customize it to suit my needs!

Now I have a complete solution, from experiment design to results reporting.
Enjoy the Efficiency of a Seamless Workflow with Intuitive Operation and Upgradability

A Single Software Solution for Smooth Experimental Workflow from Start to Finish

cellSens is available in three different versions to suit individual requirement.

**Dimension**—comprehensive report-making capabilities streamlines operations from beginning to end.
Also available in a desktop version for offline analysis.

**Standard**—meets the needs for basic image acquisition and analysis while simplifying operation.

**Entry**—simplest package for snapping an image.

---

**Innovative Functions**

**Convenient Operation**

Streamlined Workflow

- Capture multi-color, time lapse, and z-stack images with ease. Just select the appropriate capture button, add relevant parameters, and click "Start". The Process Manager makes it simple to perform multi-dimensional capture, even for beginners.

- Automatically view your data in the colors and layout you choose. Take advantage of an array of professional image processing functions, such as stitching, extended focus, deconvolution, and unmixing.

- Make measurements using an intuitive interface. cellSens offers region of interest, phase analysis, and cell count capability. Export raw measurement data to an MS Excel or cellSens workbook format with a single click.

- Actively collaborate with colleagues and coworkers with special tools including NetCam, Database, and Reporting functions. NetCam provides live over-the-internet transmission of camera data, while the Database and Reporting functions make it simple to manage, share, and distribute your own image and data reports.

**Viewing and Processing**

Image Capture

- Viewing and Processing

**Measurement and Analysis**

- Collaboration and Communication

Whole Series of Tasks is Completed within a Single Piece of Software
Avoid Clutter and Confusion by Displaying Only the Tools and Windows You Need

**Arrange Windows as You Like**
Organize the tools and windows for the job at hand to create a functional layout that works best for you.

**Common Functions can be Grouped in a Single Tab**
All necessary functions are placed where you want, when you want them. Layout tabs allow easy selection of functions according to your workflow. For instance, display camera control features in your Acquisition layout, and then remove them from view when you switch to the Processing layout.

**Create Flexible Workflow Toolbars for Repetitive Operations**
celSens Dimension lets you create custom toolbars for your most frequently used functions and then save them to the My Functions window. Custom buttons are also easy to use, with handy tab access that further enhances workflow efficiency.

**Display only those functions you need on the toolbar**

**Need help? Online help is just a click away**

**Display or hide windows as you require, or use auto-hide for clean operation**

**Access multidimensional acquisition settings in a single panel**

**Capture multi-color images with a single click**

**Switch between observation methods at the touch of a button**

**Functional panels are grouped in tabs for easier access**

**Place windows where you want them and switch between them with tab action**

**Create flexible workflow toolbars for frequently used functions and save them as favorites**
An Array of Easy-to-Use Functions to Turn Research Findings into Compelling Presentations

**Image Capture**

**Capture Multidimensional Images with Ease**
In combination with a motorized microscope and the 5D Multidimensional Imaging Module, the Process Manager makes it easy to capture multi-color and multidimensional images. With the optional Multiposition Module, you can automatically capture multi-point and large area images.

**Extended Focus Imaging**
By recording image data while gradually changing focus, EFI creates a single plane image with sharp, in-focus detail. Such EFI composites can also be created by combining collections of previously captured images.

**Image Stitching**
Dimension enables easier sample observation over a large area. The Manual MIA function composes a single montage image as you traverse the specimen. Multiple saved images with adjoining components can also be combined into a single image.

**Viewing and Processing**

**Unmixing**
With the linear unmixing algorithm in cellSens Dimension plus the 5D Multidimensional Acquisition Module, you can readily separate fluorochromes which overlap in their emission spectra — such as CFP and YFP — to produce crosstalk-free fluorescent images. This linear unmixing tool can also separate autofluorescence-related background. Brightfield image unmixing is available as part of the Count and Measure Complete Module.

**Deconvolution**
A Live 2D deconvolution algorithm is available for use during image preview and acquisition to enable better focusing. Additional deblurring techniques are available in cellSens to remove out-of-focus data. The optional CI Deconvolution Module employs the latest in Constrained Iterative Deconvolution technology to produce improved resolution, contrast and dynamic range with industry-leading speed.

**Image Composition**
This convenient function synthesizes a single image from multiple images captured using different observation methods or taken at different excitation wavelengths. Overlay DIC and fluorescence images to further assist the exploration of sample morphology and localization of your structures of interest.

**Filtering**
Dimension makes image filtering easy; providing effects such as edge enhancement, smoothing, and sharpening. Functions for easy image optimization, such as shading correction and contrast control, are included in the Standard version. And because original images can be simultaneously viewed alongside effect previews, processing results can be checked while you work.
Measurement and Analysis

Manual Measurement
Various kinds of measurements are now easier, such as point position, distance, angle, polygon area, and boundary area. Measurement data is saved as an image layer that can be exported to MS Excel and cellSens workbook formats, or viewed using the free cellSens Viewer software.

Areas, Counts and Classification
Count cells, measure areas, and calculate intensity profiles in the base Dimension package. Perform advanced object analysis and multiparameter classification with the Count & Measure Complete option.

Collaboration and Communication

Reporting
A convenient Reporting tool combines images with image property data, measurement data and your own customized fields into a report template with easy drag-and-drop operation. These Microsoft Word reports will let you quickly and easily collaborate with colleagues and communicate your results.

Database
SQL Server Express based Database functionality makes storage, management and retrieval of images, data, overlays and reports simple and easy, across a local network or across the world.

cellSens functions

<table>
<thead>
<tr>
<th>Layout</th>
<th>dimension</th>
<th>Standard</th>
<th>Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Image Ac quisition</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Image Processing</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Image Analysis</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Documentation</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Remote Viewing</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

System Examples

- Enables easy capture of multi-color images.
- Perfect for quick and easy snapshots.