**DP27 Specification**

<table>
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<tr>
<th>Feature</th>
<th>Details</th>
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</thead>
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<tr>
<td><strong>Imaging sensor</strong></td>
<td>Single chip color CCD</td>
</tr>
<tr>
<td><strong>Imaging sensor Size</strong></td>
<td>2/3 inch color CCD</td>
</tr>
<tr>
<td><strong>Effective pixels</strong></td>
<td>5.05 megapixels (total: 5.24 megapixels)</td>
</tr>
<tr>
<td><strong>Scanning method</strong></td>
<td>Progressive scanning</td>
</tr>
<tr>
<td><strong>Color filter</strong></td>
<td>RGB primary color on-chip filters</td>
</tr>
<tr>
<td><strong>Recording area</strong></td>
<td>8.4(H) × 6.62(V) mm, diagonal length 10.73 mm</td>
</tr>
<tr>
<td><strong>Maximum recorded pixels</strong></td>
<td>4.7 megapixels (2448 × 1920)</td>
</tr>
<tr>
<td><strong>Mount</strong></td>
<td>C-mount</td>
</tr>
<tr>
<td><strong>Sensitivity</strong></td>
<td>Equivalent to ISO 100/200/400</td>
</tr>
<tr>
<td><strong>Metering Area</strong></td>
<td>Full image / 30% / 1%</td>
</tr>
<tr>
<td><strong>Exposure control</strong></td>
<td>Auto/Manual</td>
</tr>
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<td><strong>Exposure control</strong></td>
<td>AE lock (enabled when Auto Exposure is selected)</td>
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<td><strong>Exposure compensation</strong></td>
<td>-2EV to +1EV, +side: 1/6EV step, - side: 1/3EV step</td>
</tr>
<tr>
<td><strong>Exposure time</strong></td>
<td>Auto: 1/20,000s to 2s / Manual: 1/20,000s to 8s</td>
</tr>
<tr>
<td><strong>Camera I/F</strong></td>
<td>USB3.0 Micro-B</td>
</tr>
<tr>
<td><strong>Dimension Camera Head</strong></td>
<td>77(W) × 69.5(D) × 42.5(H) mm</td>
</tr>
<tr>
<td><strong>Dimension Control Unit</strong></td>
<td>180(W) × 200(D) × 47(H) mm</td>
</tr>
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*cellSens software is not for clinical diagnostic use.

**Image size**

- 2448 × 1920
- 1920 × 1080 (Full HD)
- 1224 × 960
- 1224 × 960 (AVI File)
- 15fps (2448 × 1920)
- 22fps (1920 × 1080)
- 30fps (1224 × 960)
- 1920 × 1200 WUXGA
- 1920 × 1080 Full HD
- 1680 × 1050 WSXGA+
- 1600 × 1200 UXGA
- 1280 × 1024 SXGA
- 1280 × 960 QVGA
- 1280 × 854 WXGA
- 1280 × 768 WXGA
- 1024 × 768 XGA
- 1024 × 600 WSVGA
- 800 × 480 WVGA

**Live image display (frame rate)**

- 2448 × 1920
- 1920 × 1080 (Full HD)
- 1224 × 960
- 15fps (2448 × 1920)
- 22fps (1920 × 1080)
- 30fps (1224 × 960)

**Compatible image display**

- 1920 × 1200 WUXGA
- 1920 × 1080 Full HD
- 1680 × 1050 WSXGA+
- 1600 × 1200 UXGA
- 1280 × 1024 SXGA
- 1280 × 960 QVGA
- 1280 × 854 WXGA
- 1280 × 768 WXGA
- 1024 × 768 XGA
- 1024 × 600 WSVGA
- 800 × 480 WVGA

**PC interface**

- USB flash memory, USB-HDD
- Camera I/F: USB 3.0 Type-A
- Display output: DVI-I (Digital/Analog RGB)
- I/F: USB 2.0 × 4, USB 3.0 × 1
- Wired LAN: 100Base-TX/10Base-T
- Serial port: RS-232C D-Sub 9-pin
- Audio: Mic in, Line out

**Scale display**

- Scale view & burn in can be selected

**Measuring functions**

- Available measuring functions: Area, Distance of 2 Points, 3 Points Circle, Distance between 2 Circle Centers, 3 Points Angle, 4 Points Angle, Perpendiculars, Polygon Area, Boundary Length, Distance of Parallel Lines, XY Distance, Count, Poly Line, and Cross Line

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**High Resolution and Accurate Colors for Documentation**

- OLYMPUS CORPORATION is ISO14001 certified.
- OLYMPUS CORPORATION is FM553994/ISO9001 certified.
- All company and product names are registered trademarks and/or trademarks of their respective owners.
- Images on the PC monitors are simulated.
- Image data courtesy of: "Human iPS Cell colony" Isao Asaka Center for iPS Cell Research and Application, Kyoto University (lower right, cover page)
High image quality and reliable color reproduction with 5.05-megapixel high-resolution CCD. Streamline documentation procedures with high frame-rate live capture.

Three color modes

Three color modes are provided, enabling the operator to tailor the image to suit the requirements of different applications. By selecting one of the three preset modes, optimum images can be acquired under various samples and observations without having to change all the settings each time.

Superior functionality and enhanced scalability give you more flexibility and operational convenience

Adjust white balance, switch to live display and capture images, all at the touch of a button. cellSens offers an array of image processing capabilities, including a versatile shading function that enables real-time correction for variations in peripheral field illumination intensity. In addition, exposure settings, magnifications, and other parameters are saved with acquired images for easy storage and retrieval.

The innovative cellSens software offers a wide array of useful and easy-to-use functions. Split-screen display, for example, provides simultaneous viewing of multiple images, or a live image and the most recently captured image. Pictures taken at adjacent locations can also be stitched together to create a single image using the Multi-Image Array functionality. cellSens software has the capability to store user comments with captured images, which can be referred to as necessary or searched using the cellSens Database.

Easy USB 3.0 connection

The DP27 is compliant with the USB 3.0 standard for quick connection to compatible computers and fast transfer of image data.

Flexible design with stand-alone operation capability

While PC-connected operation provides optimal functionality and scalability, the DP27 can also function effectively in a stand-alone configuration, which features simple operation and easy control from mouse, keyboard or touchscreen monitor.

High quality image design optimized for documentation

5.05-megapixel high-definition CCD

Equipped with an exceptional 5.05-megapixel CCD, the DP27 digital camera captures images at up to 2448 x 1920 pixel resolution. Large areas captured at low magnification offer exceptional, vivid clarity, even when enlarged several times.

Excellent color reproduction

Precise reproduction of fine structures and subtle color differences allows areas of interest to be identified with an accuracy equivalent to observation through microscope.

15 frames per second under high resolution

DP27 provides a fast and smooth live image at the 5.05 megapixel resolution, for quick and effortless panning and focusing. Even when working at Full HD resolution, a comfortably fast live image at 22 frames per second is available. As the non-compressed image is able to reproduce images with absolutely no degradation in quality, operators make simple focusing and framing.

Flexible design with stand-alone operation capability

Simple, space-saving stand-alone connectivity

While PC-connected operation provides optimal functionality and scalability, the DP27 can also function effectively in a stand-alone configuration, which features simple operation and easy control from mouse, keyboard or touchscreen monitor.
High image quality and reliable color reproduction with 5.05-megapixel high-resolution CCD.
Streamline documentation procedures with high frame-rate live capture.

5.05-megapixel high-definition CCD
Equipped with an exceptional 5.05-megapixel CCD, the DP27 digital camera captures images at up to 2448 x 1920 pixel resolution. Large areas captured at low magnification offer exceptionally vivid clarity, even when enlarged several times.

Excellent color reproduction
Precise reproduction of fine structures and subtle color differences allows areas of interests on the monitor to be identified with an accuracy equivalent to observation through microscope.

15 frames per second under high resolution
DP27 provides a fast and smooth live image at the 5.05 megapixel resolution, for quick and effortless panning and focusing. Even when working at Full HD resolution, a comfortably fast live image at 22 frames per second is available. As the non-compressed image is able to reproduce images with absolutely no degradation in quality, operators make simple focusing and framing.

Three color modes
Three color modes are provided, enabling the operator to tailor the image to suit the requirements of different applications. By selecting one of the three preset modes, optimum images can be acquired under various samples and observations without having to change all the settings each time.

High fidelity mode: Reliable color reproduction equivalent to microscope observation.
Normal mode: Enhanced color facilitates acquisition of even pale stained specimens.
Cell culture mode: Dedicated to phase contrast and DIC observations.

Superior functionality and enhanced scalability give you more flexibility and operational convenience

CellSens imaging software
Adjust white balance, switch to live display and capture images, all at the touch of a button. cellSens offers an array of image processing capabilities, including a versatile shading function that enables real-time correction for variations in peripheral field illumination intensity. In addition, exposure settings, magnifications, and other parameters are saved with acquired images for easy storage and retrieval.

Flexible design with stand-alone operation capability

Simple, space-saving stand-alone connectivity
While PC-connected operation provides optimal functionality and scalability, the DP27 can also function effectively in a stand-alone configuration, which features simple operation and easy control from mouse, keyboard or touchscreen monitor.
**DP27 Specification**

- **Type:** Single chip color CCD camera
- **Imaging sensor:** Size 2/3 inch color CCD
- **Effective pixels:** 5.05 megapixels (total: 5.24 megapixels)
- **Scanning method:** Progressive scanning
- **Color filter:** RGB primary color on-chip filters
- **Recording area:** 8.4(H) × 6.62(V) mm, diagonal length 10.73 mm
- **Maximum recorded pixels:** 4.7 megapixels (2448 × 1920)
- **Mount:** C-mount
- **Sensitivity:** Equivalent to ISO 100/200/400
- **Metering Area:** Full image / 30% / 1%
- **Exposure control:** Auto/Manual
  - AE lock (enabled when Auto Exposure is selected)
  - Exposure compensation: Area -2EV to +1EV, +side:1/6EV step, - side 1/3EV step
  - (enabled when Auto Exposure is selected.)
- **Exposure time:** Auto:1/20,000s to 2s
  - Manual: 1/20,000s to 8s
- **Camera I/F:** USB3.0 Micro-B
- **Dimension Camera Head:** 77 (W) × 69.5 (D) × 42.5 (H) mm
- **Control Unit:** 180 (W) × 200 (D) × 47 (H) mm

- **Image size**
  - Live image display (frame rate)
    - 2448 × 1920
    - 1920 × 1080 (Full HD)
    - 1224 × 960
    - 1224 × 960 (AVI File)
    - 15fps (2448 × 1920)
    - 22fps (1920 × 1080)
    - 30fps (1224 × 960)
  - Compatible image display
    - 1920 × 1200 WUXGA
    - 1920 × 1080 Full HD
    - 1680 × 1050 WSXGA+
    - 1600 × 1200 UXGA
    - 1280 × 1024 SXGA
    - 1280 × 960 QVGA
    - 1280 × 854 WXGA
    - 1280 × 768 WXGA
    - 1024 × 768 XGA
    - 1024 × 600 WSVGA
    - 800 × 480 WVGA

- **Storage media**
  - USB flash memory, USB-HDD
  - Camera I/F: USB 3.0 Type-A
  - Display output: DVI-I (Digital/Analog RGB)
  - I/F: USB 2.0 × 4, USB 3.0 × 1
  - Wired LAN: 100Base-TX/10Base-T
  - Serial port: RS-232C D-Sub 9-pin
  - Audio: Mic in, Line out

- **Scale display**
  - Scale view & burn in can be selected

- **Measuring functions**
  - Available in PC through software
  - Available in Microscope system
  - Measuring functions:
    - Distance of 2 Points
    - Distance of 3 Points Circle
    - Distance between 2 Circle Centers
    - 3 Points Angle
    - 4 Points Angle
    - Perpendiculars
    - Polygon Area
    - Boundary Length
    - Distance of Parallel Lines
    - XY Distance
    - Count
    - Poly Line
    - Cross Line

- **PC connection**
  - 2448 × 1920
  - 1920 × 1080 (Full HD)
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  - 800 × 480 WVGA

- **Interface cable**
  - DP27-CU
  - C-mount camera adapter
  - Microscope

- **Software**
  - cellSens software
  - DP2-TWAIN TWAIN driver
  - DP2-SAL

- **Stand-alone configuration**
  - 2448 × 1920
  - 1920 × 1080 (Full HD)
  - 1224 × 960
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  - 800 × 480 WVGA

- **Audio**
  - Mic in, Line out

- **OEM**
  - According to cellSens specifications

- **Specifications**
  - All company and product names are registered trademarks and/or trademarks of their respective owners.
  - Images on the PC monitors are simulated.
  - Images in the PC monitors are simulated.
  - Specifications and appearances are subject to change without any notice or obligation on the part of the manufacturer.

- **Not for clinical diagnostic use**