



*Digital binocular microscope, 1000x, integrated 3.2 MP camera, rechargeable, N-PLAN objectives*

|   |                        |             |
|---|------------------------|-------------|
| <b>Observation Method - Transmitted Light</b> | Brightfield            | Yes         |
|   | Simple polarized light | As optional |

|                  |                       |                   |
|------------------|-----------------------|-------------------|
| <b>Main Body</b> | Type                  | Upright           |
|                  | Construction material | Aluminum die-cast |

|             |                              |                        |
|-------------|------------------------------|------------------------|
| <b>Head</b> | Type                         | Binocular (Siedentopf) |
|             | Inclination                  | 30°                    |
|             | 360° rotating                | Yes                    |
|             | Interpupillary distance (mm) | 48-75                  |
|             | Dioptric adjustment          | On left tube           |
|             | Fixing screw for eyepieces   | Yes                    |
|             | Tube inner diameter (mm)     | 23                     |

|                  |                                   |             |
|------------------|-----------------------------------|-------------|
| <b>Eyepieces</b> | Field number (mm)                 | 18          |
|                  | Magnification                     | 10x         |
|                  | Pointer                           | As optional |
|                  | Micrometric scale                 | As optional |
|                  | Diameter of micrometer glass (mm) | 20          |

|                  |                           |           |
|------------------|---------------------------|-----------|
| <b>Nosepiece</b> | Positions                 | Quadruple |
|                  | Bi-directional            | Yes       |
|                  | Rotation on ball bearings | Yes       |
|                  | Objective thread          | RMS       |

|                                     |                         |                       |
|-------------------------------------|-------------------------|-----------------------|
| <b>Objectives</b>                   | Optical system          | 160                   |
|                                     | Anti-fungus treatment   | Yes                   |
|                                     | Parfocal distance (mm)  | 45                    |
|                                     | Standard magnifications | 40x-1000x             |
|                                     | Type                    | N-PLAN                |
|                                     | Objectives included     | 4x/0.10, W.D. 15.2 mm |
|                                     |                         | 10x/0.25, W.D. 5.5 mm |
| 40x/0.65, W.D. 0.45 mm              |                         |                       |
| 100x/1.25 (Oil/Water), W.D. 0.13 mm |                         |                       |

|              |                             |                       |
|--------------|-----------------------------|-----------------------|
| <b>Stage</b> | Type                        | Double layer          |
|              | Dimensions (mm)             | 125x116               |
|              | Moving mechanism            | Rack and pinion       |
|              | Moving range (mm)           | 70x30                 |
|              | Material                    | Anti-scratch painting |
|              | Specimen holder             | Yes                   |
|              | Slide number                | 1                     |
|              | X-Y Vernier scale           | Yes                   |
|              | Vernier scale accuracy (mm) | 0.1                   |

|  |  |  |
|--|--|--|
| <b>Condenser - Single Position</b>               | Type   | Abbe   |
|  | Numerical aperture (N.A.)                    | 1.25   |
|  | Diaphragms                                   | Iris   |
|  | Centrable                                    | Pre-centered   |
|  | Focusable                                    | By rotation  |
| <b>Focusing System</b>                           | Type   | Coaxial coarse & fine  |
|  | Coarse total travel (mm)                     | 16   |
|  | Fine total travel (per single rotation) (mm) | 0.4  |
|  | Fine graduations                             | 100  |
|  | Fine resolution (µm)                         | 4  |
|  | Upper stop to prevent contact                | Yes  |
|  | Adjustable tension                           | Yes  |
| <b>Transmitted Illumination</b>                  | Type   | X-LED  |
|  | X-LED type                                   | X-LED1   |
|  | Light source power (W)                       | 1  |
|  | Brightness control                           | Manual   |
|  | Lifetime (hours)                             | > 65,000   |
|  | Temperature (K)                              | 6,300  |
|  | Max. required power (W)                      | 1.5  |
| <b>Power Supply for Transmitted Illumination</b> | Type   | External   |
|  | Microscope connector                         | Jack, 2.1 mm   |
|  | Power plug type                              | Multi-plug (EU, UK, US)                                      |
|  | Input voltage                                | 100/240 Vac, 50/60 Hz  |
|  | Output voltage                               | 5 Vdc 500 mA   |
|  | LED indicator                                | Yes  |
|  | Rechargeable batteries                       | Yes  |
|  | Battery type                                 | Li-ion (battery pack)  |
|  | Working time of batteries (hours)            | 15   |
| Charging time of batteries (hours)               | 6  |  |
| <b>Accessories Included</b>                      | Dust cover                                   | Yes  |
|  | Immersion oil (10ml)                         | Yes  |
|  | Tension adjustment tool                      | Yes  |
|  | User Manual                                  | Digital version (downloadable)                               |
|  | USB cable (m)                                | 1.8  |
|  | CD-ROM                                       | Yes  |
| <b>Additional Information</b>                    |  | Mirror for transmitted light (as optional)                   |
| <b>Product Dimensions</b>                        | Height (mm)                                  | 365  |
|  | Width (mm)                                   | 170  |
|  | Depth (mm)                                   | 320  |
| <b>Product Weight</b>                            | (kg)   | 4  |
| <b>Digital Head</b>                              | Resolution (MP)                              | 3.2  |
|  | Sensor type                                  | CMOS   |
|  | Sensor size                                  | 1/2.5"   |
|  | Sensor aspect ratio                          | 4/3  |
|  | Full image size                              | 2048x1536  |
|  | Pixel size (µm)                              | 2.2x2.2  |
|  | Frame rate                                   | 4 fps (2048x1536),<br>8 fps (1280x1024),<br>30 fps (640x480) |
|  | S/N ratio (dB)                               | 40   |
|  | Dynamic range (dB)                           | 66.5   |
|  | Sensitivity (V/lux*s @550nm)                 | 0.53   |
|  | Exposure time (s)                            | 15 - 1/1500  |
|  | USB type                                     | 2.0  |
|  | System requirements                          | Win 7 / Win 8 / Win 10 (32/64 bit)                           |
|  | Software                                     | OPTIKA Vision Lite   |