



*Digital binocular brightfield microscope, 1000x, N-PLAN objectives, 3.1 MP camera with tablet*

|   |                                     |                        |
|---|-------------------------------------|------------------------|
| <b>Observation Method - Transmitted Light</b> | Brightfield                         | Yes                    |
|   | Darkfield                           | As optional            |
|   | Simple polarized light              | As optional            |
| <b>Main Body</b>                              | Type                                | Upright                |
|   | Construction material               | Aluminum die-cast      |
|   | Trasportation handle                | Yes                    |
| <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)                   | 20                     |
|   | Magnification                       | 10x                    |
|   | Pointer                             | As optional            |
|   | Micrometric scale                   | As optional            |
|   | Diameter of micrometer glass (mm)   | 21                     |
|   | High eyepoint (for glass wearers)   | Yes                    |
|   | Rubber cup                          | Yes                    |
| <b>Nosepiece</b>                              | Positions                           | Quadruple              |
|   | Reversed                            | Yes                    |
|   | 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                 |
|   |                                     | 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 |                        |

|  |  |  |
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| <b>Stage</b>                                     | Type   | Double layer   |
|  | Dimensions (mm)                                | 150x139  |
|  | Moving mechanism                               | Rackless   |
|  | Moving range (mm)                              | 75x33  |
|  | 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   |
|  | Removable                                      | Yes  |
|  | Numerical aperture (N.A.)                      | 1.25   |
|  | Magnification scale for simplified positioning | Yes  |
|  | Diaphragms                                     | Iris   |
|  | Centrable                                      | Yes  |
|  | Focusable                                      | By rack and pinion   |
| <b>Focusing System</b>                           | Type   | Coaxial coarse & fine  |
|  | Coarse total travel (mm)                       | 18   |
|  | 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>                  | Kohler illumination                            | Fixed  |
|  | Type   | X-LED  |
|  | X-LED type                                     | X-LED3   |
|  | Light source power (W)                         | 3.6  |
|  | Brightness control                             | Manual   |
|  | Lifetime (hours)                               | > 65,000   |
|  | Temperature (K)                                | 6,300  |
|  | Max. required power (W)                        | 6  |
| <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                                 | 6 Vdc 2.5 A  |
| <b>Accessories Included</b>                      | Dust cover                                     | Yes  |
|  | Immersion oil (10ml)                           | Yes  |
|  | Tension adjustment tool                        | Yes  |
|  | User Manual                                    | Digital version (downloadable)   |
|  | Calibration slide                              | Yes  |
|  | Touch pen                                      | Yes  |
|  | USB cable (m)                                  | 0.5  |
| <b>Additional Information</b>                    |  | Mirror for transmitted light (as optional).<br>External rechargeable battery pack (as optional).<br>Tablet keyboard (as optional). |
| <b>Product Dimensions</b>                        | Height (mm)                                    | 525  |
|  | Width (mm)                                     | 260  |
|  | Depth (mm)                                     | 320  |
| <b>Product Weight</b>                            | (kg)   | 7.4  |

|                              |   |                   |
|------------------------------|---|-------------------|
| <b>Camera specifications</b> | PC Camera resolution (MP)               | 3.1               |
|                              | Camera resolution (n° of pixels: W x H) | 2048x1536         |
|                              | USB Signal output                       | USB 2.0           |
|                              | Color / Monochrome                      | Color             |
|                              | Sensor Size                             | 1/2.5"            |
|                              | Sensor Technology                       | CMOS              |
|                              | Sensor Type                             | APTINA CMOS       |
|                              | Rolling Shutter                         | Yes               |
|                              | Image Format                            | 4/3               |
|                              | Pixel Size (µm)                         | 2.2x2.2           |
|                              | Frame rate full resolution (fps)        | 8@1280x1024       |
|                              | Frame rate other resolution (fps)       | 30@640x480        |
|                              | Sensitivity                             | 0.53 V/lux-second |
|                              | Signal/Noise Ratio (DB)                 | 40.5              |
|                              | Dynamic range (DB)                      | 66.5              |
|                              | ADC conversion                          | 12 Bit            |
|                              | Color Depth                             | 8 Bit             |
|                              | Exposure time                           | ... - 1.5 sec     |
|                              | Binning                                 | 1x1               |
|                              | IR filter                               | Yes               |
| IR filter range (nm)         | 680                                     |                   |
| Camera Power                 | PC USB                                  |                   |
| C-Mount                      | Yes                                     |                   |

|                           |                   |     |
|---------------------------|-------------------|-----|
| <b>Camera accessories</b> | Calibration slide | Yes |
|---------------------------|-------------------|-----|

|                                   |                     |                   |
|-----------------------------------|---------------------|-------------------|
| <b>Environment specifications</b> | Working Temperature | -10°C up to +50°C |
|                                   | Storage Temperature | -20°C up to +60°C |
|                                   | Relative Humidity   | 30% to 80%        |
|                                   | Storage Humidity    | 10% to 60%        |

|                         |    |                    |
|-------------------------|----|--------------------|
| <b>Operating System</b> | OS | Windows 10 (64Bit) |
|-------------------------|----|--------------------|

|                           |    |         |
|---------------------------|----|---------|
| <b>Available Software</b> | SW | PROVIEW |
|---------------------------|----|---------|

|                 |       |   |
|-----------------|-------|---|
| <b>Warranty</b> | Years | 2 |
|-----------------|-------|---|

|               |                    |   |
|---------------|--------------------|---|
| <b>Tablet</b> | Operating system   | Windows 10 (64Bit)                                  |
|               | CPU                | Intel® Atom™ Z8350, Quad core                       |
|               | CPU speed          | 1.44 GHz  |
|               | Graphic card       | Intel® HD Graphics 400                              |
|               | RAM                | Ram 4 GB LPDDR3                                     |
|               | Display size       | LED 10.1" IPS Multi Touch Screen                    |
|               | Display resolution | 1920x1200   |
|               | Storage            | Hdd 64 GB   |
|               | Network            | Wireless - Bluetooth 4.0                            |
|               | Input ports        | Micro USB (OTG) - USB Type-C - Micro SD card reader |
|               | Output ports       | Microphone - Headphone - Micro HDMI                 |
|               | Battery Type       | Lithium-ion   |
|               | Battery capacity   | 6500 mAh  |
|               | Power consumption  | 15W   |
|               | Power supply       | 5V 3A   |
|               | Dimensions (mm)    | 261X167X9   |
|               | Weight (Kg)        | 0.53  |
|               | Language           | Multilanguage                                       |

|                           |                                  |     |
|---------------------------|----------------------------------|-----|
| <b>Tablet accessories</b> | OTG cable (micro USB-B to USB-A) | Yes |
|                           | USB cable USB-B to USB-A (0.5m)  | Yes |
|                           | Touch pen                        | Yes |