



*Digital video microscope, 400x,  
achromatic objectives*

|                   |                                   |                   |
|-------------------|-----------------------------------|-------------------|
| <b>Main Body</b>  | Type                              | Upright           |
|                   | Construction material             | Aluminum die-cast |
|                   | with transportation handle        | Yes               |
|                   | Internal prism                    | Glass prism       |
|                   | Optical system                    | Finite 160 mm     |
|                   | Optics with anti-fungus treatment | Yes               |
| <b>Head</b>       | Type                              | Monocular         |
|                   | Inclination                       | 45°               |
|                   | Rotation                          | 360°              |
|                   | Fixing screw for eyepieces        | Yes               |
|                   | Tube inner diameter (mm)          | 23                |
|                   |                                   |                   |
| <b>Eyepieces</b>  | Magnification                     | 10x               |
|                   | Field number (mm)                 | 18                |
|                   | Micrometric scale                 | Optional          |
| <b>Nosepiece</b>  | Positions                         | Quadruple         |
|                   | Reversed                          | Yes               |
|                   | Bi-directional                    | Yes               |
|                   | Rotation on ball bearings         | Yes               |
|                   | Objective thread                  | RMS               |
| <b>Objectives</b> | Type                              | ACH               |
|                   | Correction                        | Achromatic        |
|                   | Parfocal distance (mm)            | DIN 45            |
|                   | Optical system                    | Finite 160 mm     |
|                   | Standard magnifications           | 4x-10x-40x        |
|                   |                                   | M-131             |
|                   |                                   | M-132             |
|                   |                                   | M-134             |
|                   |                                   |                   |

|              |                             |                       |
|--------------|-----------------------------|-----------------------|
| <b>Stage</b> | Dimensions (mm)             | 125x125               |
|              | Mechanical stage            | Rack and pinion       |
|              | Material                    | Anti-scratch painting |
|              | Specimen holder             | Yes                   |
|              | Slide number                | 1                     |
|              | Moving range (mm)           | 62x24                 |
|              | X-Y movement                | Yes                   |
|              | X-Y Vernier scale           | Yes                   |
|              | Vernier scale accuracy (mm) | 0.1                   |
|              | Type                        | Double layer          |
|              | Right / Left hand           | Right                 |

|                                    |                           |              |
|------------------------------------|---------------------------|--------------|
| <b>Condenser - Single Position</b> | Type                      | Abbe         |
|                                    | Numerical aperture (N.A.) | 0.9 / 1.25   |
|                                    | Aperture diaphragm        | Iris         |
|                                    | Holder for color filters  | Yes          |
|                                    | Centerable                | Pre-centered |
|                                    | Focusable                 | By rotation  |

|                        |  |                       |
|------------------------|--|-----------------------|
| <b>Focusing System</b> | Type   | Coaxial coarse & fine |
|                        | Focus modes                                    | Coarse & fine         |
|                        | Coarse total travel (mm)                       | 13                    |
|                        | Coarse total travel (per single rotation) (mm) | 0.9                   |
|                        | Fine graduations                               | 100                   |
|                        | Fine total travel (per single rotation) (mm)   | 1,2                   |
|                        | Fine resolution ( $\mu\text{m}$ )              | 12                    |
|                        | Upper stop to prevent contact                  | Yes                   |

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

|                                 |                         |          |
|---------------------------------|-------------------------|----------|
| <b>Transmitted Illumination</b> | Type                    | LED      |
|                                 | Light source power (W)  | 1        |
|                                 | Brightness control      | Manual   |
|                                 | Color Temperature (K)   | 5,500    |
|                                 | Lifetime (hours)        | > 65,000 |
|                                 | 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 2,5 A                        |
|  | Use with batteries                 | Yes, not supplied                  |
|  | Rechargeable Battery               | Yes                                |
|  | Battery type                       | Ni-MH (3x, AAA size), 1.2V, 650mAh |
|  | Working time of batteries (hours)  | up to 15                           |
|  | Charging time of batteries (hours) | 8                                  |

|                             |             |                                |
|-----------------------------|-------------|--------------------------------|
| <b>Accessories Included</b> | Dust cover  | Yes                            |
|                             | User Manual | Digital version (downloadable) |

|                                       |            |     |
|---------------------------------------|------------|-----|
| <b>Product Dimensions (footprint)</b> | Width (mm) | 133 |
|                                       | Depth (mm) | 175 |

|   |   |                        |
|---|---|------------------------|
| <b>Product Dimensions<br/>(overall footprint)</b> | Height (mm)                             | 350                    |
|   | Width (mm)                              | 158                    |
|   | Depth (mm)                              | 250                    |
| <b>Product Weight</b>                             | (kg)                                    | 3                      |
| <b>Camera General<br/>specifications</b>          | SD Card Still image capture             | Yes                    |
|   | SD Card Video recording                 | Yes                    |
|   | Dimensions (mm)                         | 180 x 150 x 90         |
|   | Weight (kg)                             | 0.360                  |
| <b>Sensor</b>                                     | Camera resolution (n° of pixels: W x H) | 1844x1080              |
|   | Color / Monochrome                      | Color                  |
|   | Sensor Size                             | 1/2.8"                 |
|   | Sensor Technology                       | CMOS                   |
|   | Sensor Type                             | MICRON CMOS            |
|   | Image Format                            | 16/9                   |
|   | Pixel Size (mm)                         | 2.9x2.9                |
|   | Acquisition technology                  | Rolling shutter        |
|   | Exposure time                           | 0-33333ms              |
|   | IR filter                               | Yes                    |
|   | IR filter range (nm)                    | 680                    |
| <b>USB</b>  | Camera resolution (MP)                  | 2                      |
|   | Frame rate full resolution (fps)        | 30@1844x1080           |
| <b>Camera Power Supply</b>                        | Type                                    | External               |
|   | Connector                               | Jack, 2.1 mm           |
|   | Power plug type                         | Multiplug (EU, UK, US) |
|   | Input voltage                           | 100/240 Vac, 50/60Hz   |
|   | Output voltage                          | 5 Vdc 2,5A             |
|   | LED indicator                           | Yes                    |
| <b>Available Software</b>                         | Camera SW                               | S-Viewer               |
| <b>HDMI Monitor</b>                               | Display size                            | 7"                     |
|   | Display resolution                      | 1024x600               |
| <b>System accessories</b>                         | SD card                                 | 4GB                    |
|   | USB SD card reader                      | Yes                    |
| <b>General</b>                                    | <b>Built-in SW Specifications</b>       |                        |
|   | Multi-language menu                     | Yes                    |
|   | Available languages                     |                        |
|   | Chinese                                 | Yes                    |
|   | English                                 | Yes                    |
|   | Russian                                 | Yes                    |

|                          |                               |             |
|--------------------------|-------------------------------|-------------|
| <b>Image Acquisition</b> | Continuous automatic exposure | Yes         |
|                          | Manual exposure               | Yes         |
|                          | Color acquisition             | Yes         |
|                          | Gray-scale acquisition        | Yes         |
|                          | Manual Time-lapse             | Yes         |
|                          | White Balance                 | Auto/Manual |
|                          | Image enhancement             | Yes         |
|                          | Horizontal Flip               | Yes         |
|                          | Verical Flip                  | Yes         |
| <b>Image Processing</b>  | Grids                         | Yes         |
| <b>Measurements</b>      | Still image measurement       | Yes         |
|                          | Select measurement unit       | Yes         |
|                          | Available measurements        |             |
|                          | Line                          | Yes         |