# PRO-7 3D 5M



All-in-One 3D 5 MP Digital Measuring Microscope
Easy and Responsive Sample Inspection, Acquisition,
Documentation, and Measurement without a Computer



Basic configuration of PRO-7 3D 5M microscope

#### **Features and Functions:**

- All-in-One digital microscope that does not require a computer, saving both space and financial resources
- Built-in 11.6" Full HD monitor with HDMI connection for a second device: TV, projector or secondary monitor
- Microscope functions operated via a wireless mouse directly on the device monitor
- Unique capability for spatial observation using a 3D adapter; seamless switching between 2D and 3D observation; same central position for both standard 2D and 3D observation
- Wide optical zoom range of 7:1 (0.7 5×) with constant focal plane and click-stop positions: 0.7×, 1×, 1.5×, 2×, 2.5×, 3×, 4×, 5×
- Built-in HD digital camera with 5 MP image resolution
- Smooth live view with Full HD resolution (1920 × 1080 px) at 60 fps
- Integrated computer with measurement software
- **Built-in powerful LED ring light illuminator** with adjustable intensity, providing homogeneous sample illumination
- Wide range of measurement functions in live view with the option to save into images
- Adding text notes with an arrow to the live view with the option to save them into images
- Saving 5 MP (3072 × 1728 px) images, Full HD (1920 × 1080 px@30fps) recorded videos and measurement results to a connected USB flash drive or microSD card
- Time-lapse imaging
- Viewing saved images and videos directly on the device
- Exporting measurement results to a CSV file (compatible with Microsoft® Excel® and other spreadsheet software)
- Easy handling and quick system startup



Scan with your smart phone to view 3D observation demonstration videos

- Ergonomic positioning of the built-in monitor to reduce user fatigue
- Optional extension with an additional 0.5× objective lens
- Optional advanced stands such as a transmitted light stand, boom stands, and LED illuminators
- Certifications: CE, RoHS
- Dimensions including the built-in monitor (w × d × h):  $28 \times 33 \times 46$  cm ( $11 \times 13 \times 18.1$  in); weight: 4.6 kg
- Suitable also for educational purposes

#### **Measurement Functions:**

- Measurements directly in live view with the option to save measurements into acquired images
- Selection of units and number of displayed decimal places
- Point coordinates
- Line segment length, distance between parallel lines, polyline length
- Radius and angle of an arc
- Circle defined by radius, diameter, or three points: radius, diameter, perimeter and area
- Distance of the circle center from a reference line
- Concentric circles radii, diameters, perimeters, areas
- Distance between the centers of two circles
- Angle defined by three points
- Angle defined by two line segments with the vertex possibly outside the field of view
- Perpendicular distance from a reference line
- Rectangle perimeter and area
- Polygon perimeter and area
- Display of scale bar, central cross, rulers and grids
- Automatic snapping of measurement points to edges in the image
- Options to choose the color and thickness of measurement object lines

## **Magnification Specifications:**

Objective Magnification	1× (included)	0.5× (optional)
Total magnification on the built-in 11.6" monitor	14× – 99×	7× – 50×
Total magnification on optional 24" monitor	29× – 205×	14.5× – 103.5×
Field of view	17.5 × 9.9 mm – 2.6 × 1.4 mm	36 × 20 mm – 5 × 3 mm
Working distance	110 mm	180 mm

### Parts of the Basic Configuration:

The microscope body with a 7:1 zoom and built-in  $1\times$  objective lens, 5 MP built-in digital camera, integrated computer with measurement software, built-in 11.6'' Full HD monitor, 12V power supply, ring light LED illuminator, 3D adapter for spatial observation, stand with a flat base measuring (w  $\times$  d)  $26\times32$  cm and a column of 45 cm height, wireless mouse, and USB flash drive for saving images, videos, and measurement results.

