

PRO-18 AF 4K

PROMICRA

All-in-One 4K Digital Measuring Macro-microscope
with 18:1 Optical Motorized Zoom and Autofocus



PRO-18 AF 4K with optional PRO-LDRL LED illuminator for large specimens and 4K UHD monitor

Main Features:

- **All-in-One digital macro-microscope that does not need a computer, saving space and money**
- **Optical zoom with a large magnification range of 18:1 with motorized control suitable for macro and micro inspection and documentation**
- **Fast autofocus**
- **Extra-large field of view 255 × 1145 mm at the smallest zoom magnification**
- **Built-in 13.3" 4K UHD LCD monitor** or an option to connect a separate 4K or Full HD monitor, TV or projector via HDMI cable
- **Mouse control of device functions** directly on the connected monitor
- **Built-in 4K digital camera with 8 MP (4K UHD – 3840 × 2160 px) resolution for live video and still images**
- **Highly fluent live image with a frame rate of 60 frames per second** enables lag-free observation.
- **Built-in computer with measuring software**
- **Built-in ring LED diffused illumination** with smooth intensity control provides homogeneous illumination of the samples.
- **Wide range of 2D measurement functions** in live image with the option of saving to images
- **Marking points of interest in live image with arrows** with the option of saving to images
- **Automated motorized focusing (EDF)** for creating fully sharp images by combining multiple images with different focal planes
- **Image stitching** allows you to create images with a larger field of view by combining multiple images
- **4K UHD video recording to an SD card or a USB flash drive**
- **Storage of images and measurement results to an SD card or a USB flash drive**
- **Viewing of saved images, interactive comparison of a saved image with the live image or two saved images**

- Exporting measurement results to a CSV file (compatible with MS Excel and other table processors)
- Easy handling and operation, quick system start
- Ergonomic positioning of the built-in monitor to reduce user fatigue
- Optional advanced stands e.g. stand with swing arm (boom stand) and illuminators e.g. ring LED illuminator for large specimens, ring LED illuminator with polarized light, diffuse illuminator, transmitted light illuminator, gooseneck illuminator, optional XY stage
- Certification: CE, RoHS
- Dimensions including built-in 13.3" monitor (w × d × h): 50 × 38 × 54 cm
- Weight: 5 kg

Measuring Features:



- Measurements directly in the live image with the option to save the measurements to the captured images
- Choice of units (microns, mm, mils, inches) and number of displayed decimal places
- Display of calibrated scale bar
- Length of a line segment
- Distance of the point from the line
- Distance between two parallel lines
- Angle through three points, angle defined by two lines with the possibility of a vertex outside the field of view
- Rectangle: dimensions, perimeter, area
- Circle: diameter, perimeter, area
- Ellipse: diameter, perimeter, area
- Arc: diameter, length, clamped angle
- Concentric circles (intermediate circles): radii of the inner and outer circles, area of the intermediate circle
- Distance between the centres of two circles
- Polygon: perimeter, area
- Length of a curve
- Display of the central cross, grid
- Possibility to choose the color and thickness of lines of measuring objects
- Expanded measurement uncertainty: $\pm 7.99 \mu\text{m}$ in the zoom range 13×–18×, $\pm 83.07 \mu\text{m}$ in the range 1×–12×

Magnification Specifications:

	Minimal zoom value 1×	Maximal zoom value 18×
Total magnification on 13.3" built-in monitor	1.1×	20.6×
Total magnification on optional 32" monitor	2.7×	49.5×
Field of view dimensions	255 × 145 mm	14.2 × 8 mm
Working distance	250 mm	250 mm

Parts of the Basic Configuration:

PRO-18 AF 4K body with 18:1 motorized zoom and autofocus, built-in digital 4K camera, built-in computer with measuring software and 12V AC adapter, diffused ring light LED illuminator, 13.3" 4K UHD LCD monitor with mounting arm and HDMI cable, tiltable stand with 26 × 38 cm flat base with manual working distance adjustment (up to 34 cm), wireless mouse, SD card.



The specification applies to the PRO-18 AF 4K v2 model.

