Trinocular Stereo Microscope Regula 5003



The device is intended for advanced authenticity verification of passports, ID cards, travel documents, visa stamps and seals, including but not limited to entry permits, driver's licenses, vehicle registration certificates and other vehicle related documents, banknotes, revenue and special stamps, securities and other documents with security features.

The microscope enables to conduct the following types of expertise: dactyloscopic, handwriting and forensic.

The microscope is constructed in metal body and intended for desktop use. Switching the modes of operation, focusing and changing the magnification is operated by the controls located at the front and side parts of the device. It can be equipped with different complexes of white light with variable intensity control: directional spot, transmitted, ring, directional gooseneck. Regula 5003 allows you to display the zoomed image of the investigated object on the screen of the monitor using Regula Forensic Studio software. The microscope enables to perform additional visual control using eyepieces: 10 or 30 times magnification.

Functionality

- Examination of security features in banknotes and travel documents in the mode of live video
- The microscope is based on the Greenough optical system which allows obtaining stereo images of examination objects
- Smooth magnification adjustment
- Coarse and fine focus adjustment
- Additional optical path for the digital video camera
- Document clamps

Light complexes with variable intensity control

1. Directional spot – provides a fixed direction of illumination for the examined object.
2. Transmitted – helps reveal features inside or through the document substrate and signs of erasure, etching, or washing-off.
3. Ring (optional) – provides a clean view of surface details, print structure, and overall image quality.
4. Directional gooseneck (optional) – a flexible, adjustable light source allows the examiner to direct the light onto the object from almost any angle to reveal details that are not visible under flat, even illumination.

Application

- Border control and immigration services
- Customs authorities
- Law-enforcement agencies
- Forensic laboratories
- Financial institutions
- Other agencies and organizations authorized to check documents

Delivery set

- Regula Forensic Studio software intended for capturing, processing and storing images of examined objects
- Eyepieces:
    - 10X
    - 30X
    - 10X with a measuring scale

Light complexes with variable intensity control:

- directional spot
- transmitted
- ring (optional)
- directional gooseneck (optional)

Colour camera:

- type — CMOS
- effective pixels — 5 MP
- frame size, pixels:
  - 2592×1944 (Full Frame)
  - 2592×1458 (Extra Full HD)
- connection interface — USB 3.0

Magnification:

- optical — 0,8x to 7x
- objective magnification with 10x eyepieces — 8x to 140x
- objective magnification with 30x eyepieces — 24x to 420x
- for a 30 inch (75 cm) monitor* — 26x to 1330x

* – all magnifications are approximate

Diopter adjustment, dptr — ±6

Interpupillary distance, mm — 52...76

Dimensions (length×width×height), mm — 330×310×450

Weight, kg, not more than — 8

Power consumption, W, not more than — 15