Two-coordinate magneto-optical scanner Regula 7701M



The magneto-optical scanner is intended for advanced examination of banknotes, securities and documents with magnetic security features.

Regula 7701M is constructed as a single unit for desktop use in aluminum metal body. It is used with a PC and fully controlled with the help of CADR software (supplied with a unit). The device is reliable, convenient and easy-to-use.

The scanner object stage has a perforated area for document pneumatic pressing. Document surface scanning is carried out with the help of a magnetic head which is equipped with a magnetization system.

Functionality

- Construction and comparative analysis of magnetic patterns of examined documents
- Comparative examination of printing tools and materials (detection of magnetic properties of dyes in examined objects)
- Examination of magnetic security features (magnetic ink, fibers, tapes, etc.)
- Reading invisible magnetic strokes and codes
- Examination of damaged documents – reading blurred and crossed out texts printed with magnetic ink
- **Assessment of magnetic parameters for document security elements: distribution of magnetic induction, magnetic flux modulus**

Special features

- Effective magnetization system and high sensitivity of the visualizer which allows examining magnetic materials with a low level of leakage flux
- Detachable magnetization system enables to differentiate security features made of magnetically soft and magnetically hard materials
- Specialized software enables to measure quickly and accurately images of examined documents and compare them with the samples

Regula 7701M

In addition, Regula 7701M provides a possibility to carry out a comparative assessment of magnetic properties of document protection elements. The **Magnetic Measurements** function in Regula 7701M enables not only to obtain a histogram of the normal component of magnetic induction Bn (in Tesla) for a frame and to calculate the module of the magnetic flux Φn (in Weber) in this frame area, but also to compare a distance (d) between the histogram of an examined document and that of a sample. Comparing obtained parameters (Bn, Φn, d) of the examined document and the sample enables to draw a conclusion on the authenticity of the document and the magnetic image wear or damage degree.

Application

- Border control/immigration services
- Customs authorities
- Forensic departments
- Court expertise
- Law-enforcement agencies
- Financial institutions
- Other agencies and organizations authorized to check documents and banknotes

Delivery Set

- CADR software and drivers for the device control
- Optionally:
    - PC
    - Demagnetizer **Regula 7751**

Technical specifications	
Examined document size (length×width), mm, max	335×297
Field of view of the optical input system, maximum size, mm	15×18,5
Size of camera array, pixels	CMOS 1280×1024
Spatial resolution, μм, min	14
Scan time for an A4 document, min, max	5,5
Connection interface	USB 2.0
OS	Windows 10
Dimensions (length×width×height), mm, max	586×470×230
Weight of the scanner with the power supply unit, kg	15,5
Power consumption, V, max	12

Optional Accessories:

Demagnetizer Regula 7751



Functionality

- Improving the accuracy of magnetic parameter measurements obtained with the Magneto-optical scanner-analyzer Regula 7701; 7701M
- Demagnetization of magnetic protection elements and their magnetization to a state of magnetic saturation

Researched object transportation speed, cm/s — 3,5...4,5

Maximum document size, mm — 200×95

Overall dimensions (length×width×height), mm — 310×140×127

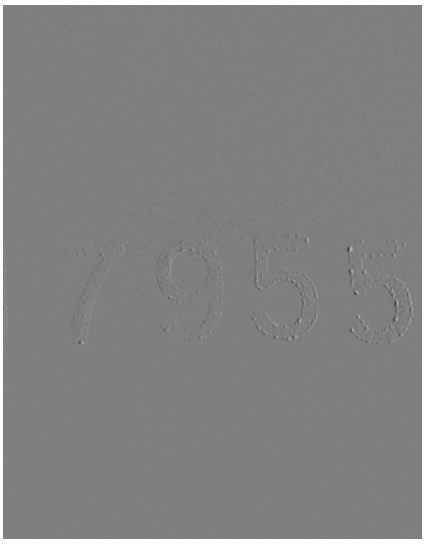
Weight, kg — 2,3

Power supply, V — 24

Power consumption, A — 0,75



Belgian Franc. 2000. 1994 series, magnetic card



Belgian Franc. 2000. 1994 series, fragment of a magnetized image



Belgian Franc. 2000. 1994 series, fragment of a demagnetized image

Aruban Florin. 500. 2003 series



Belgian Franc. 2000. 1994 series



Pula. 100. 2004, 2005 series

Cabo Verde Escudo. 2000. 1999 series

Ghana Cedi. 50. 2007, 2010 series



Bolivar. 100000. 2017 series