

Technical Specification 7505M and 7515M

Item	Specification
1.	DEVICE TYPE
	The device is intended for non-destructive investigations of metal surfaces and documents to verify authenticity and detect falsifications of vehicle identification numbers (VINs) and firearms identification number (FIN). The device is a hardware and software complex which enables to visualize (obtain video images) of the relief and structural heterogeneities of metal surfaces with magnetic properties (machining process traces, inclusion of non-ferromagnetic materials, surficial defects of joint welds) and to keep a pain-and-lacquer coating (if any) by the methods of magneto-optical visualization. The device is intended for authenticity verification, detection of firearms and ammunition identification number falsification and restoration of original identification numbers. The device contains tools for documents (driving licenses, car certificates and etc.) authenticity examination.
2.	DEVICE FUNCTIONALITY
	• Magneto-optical visualization of a physical copy from the magnetic carrier • Transformation of a magnetic signal into a video signal • A step-by-step input of images into the PC to provide automatic panoramic stitching of a digital image (e.g. a VIN) from several subframes with high spatial resolution • Investigation of markings on data carriers made of aluminium alloys (silumin bodies of cylinder blocks and reduction gear assemblies, manufacturer aluminium plates, duraluminium bodies) • Restoration of fully destroyed original VINs on ferromagnetic materials • Surface examination of nonferromagnetic materials in order to get information and (or) to prove the fact of VIN falsification • Detection of welded joint defects in ferromagnetic materials and aluminium alloys as well as detection of weak signals in surface layers of ferromagnetic objects, e.g. residual (internal) stresses Spectral luminescent magnifier Regula 4177 — The magnifier is used for authenticity verification of vehicle related documents. Examinations on different levels • protection of the document basis -security fibers, planchetes, security threads, holograms, foil stamping, pole feature, transparent vanish coating, etc. • printing methods -intaglio: texts, guilloche frames, rosettes and vignettes, microprinting, latent images and moire patterns, signs for the visually impaired, blind embossing, colour shifting ink, including OVI with embossing and latent images, etc.

	-letterpress: serial numbers, texts, barcodes, etc. -offset printing including Orlov and rainbow printing: texts, microprinting, moire patterns, background and anti-copy patterns, etc. -screen printing: security features with optically variable effects, etc. -perforation • physico-chemical protection -anti-Stokes luminescence -UV luminescence -IR luminescence • complex security features: -security features with IR-metameric ink -special polymer coating of security laminates -special polymer coating of security laminates -metallized coating -laser engraving • additional examination of -fragments of document images depending on the degree of absorption or reflection of IR light -document alterations such as erasure, etching etc. -traces of signature forgery -extraneous lines (do not originally belong to the examined object) that are performed with IR opaque inks -blurred, crossed out entries, texts and images -document mechanical defects such as cuts, tears, folds, etc.
3.	DEVICE SPECIFICATION
	• Examined object material — ferromagnetic • Magnetic tape width, mm — 25,4 • Image file format — .BMP, .GIF, .JPG, .PCX • Dimensions (length×width×height), mm — 460×370×180 • Weight without a notebook, kg — 10 • Power supply voltage from a USB port, V — 2,5 • Power consumption, W — 5 Tool kit for magnetic copying • Magnetic tape length, m — 10 • Dimensions (length×width×height), mm — 120×80×40 • Weight, kg — 0.4
	Eddy-current magnetographing device for VIN examination • Scanning time, m/s, max — 0.05 • Width of the scanning area, mm, max — 20 • Magnetic field intensity on the surface of the scanner conductor, kA/m — 30–35

	• Nonflatness of examined surface, mm, max — 0,5 • Dimensions (length×width×height), mm: -scanners — 30×45×70 -controller — 160×100×30 -charging unit — 100×80×30 Weight, kg: • scanner for nonferromagnetic materials (Al) — 0.16 • scanner for ferromagnetic materials (Fe) — 0.21 • controller — 0.3 • charging unit — 0.15 Scanner power supply voltage, V — 24 Rechargeable batteries: • time of non-stop operation, min, min — 40 (≈ 120 copies) • charging time, h — 8 • Interface with computer: USB
4.	SOFTWARE
	Composition: • Software for operation with VIN examination devices
5.	WARRANTY AND AFTER SALES SERVICE
	• Warranty period - five (5) years from commissioning; • All warranty servicing expenses will be borne exclusively by the Supplier, including transportation of the equipment to and from the service center, if required; • All supplied devices will be brand new, with accessories provided by original equipment manufacturers.

Signed: _____

Name, Surname: Maris Kaminskis

Position: Member of the Board

Tenderer: Regula Baltija LLC

Address: 34 Visku street, Daugavpils, LV-5410, Latvia

