TECHNICAL SPECIFICATION

	Integrated Hardware-Software System for In-Depth Verification of Travel Document Authenticity. Video Spectral Comparator for Level 2 (N2).
Functionalities and Basic	This device is intended for detailed examination of travel documents, technical and transport documents, stamps, driving licences, and other
Characteristics	documents with special security features.
	Operation based on Light Emitting Diodes (LEDs).
	Optical reader of the Machine Readable Zone (MRZ).
	Contactless electronic identification chip (RFID) reader.
	Barcode reader.
	Equipped with an LCD display showing operational or inspection modes.
	Verification of the checksum in the Machine Readable Zone (MRZ).
	Saving of scanned images in the following formats: JPG, BMP, TIFF.
	Device control and management via dedicated software application.
	Real-time display of the image captured by the video camera.
	Image rotation and mirroring functions.
	Image contrast adjustment capability.
	Stroboscopic comparison function between live and stored image.
Minimum	Set Configuration / Delivery Package:
Components of	The complex (main hardware-software unit);
the Complex	Power supply unit with network cable;
(to be included)	USB connection cable;
(to be included)	Video spectral magnifier;
	Light source (flashlight);
	Software product (information management application);
	UV light source;
	Technical documentation;
	, and the second
	Protective packaging suitable for safe transportation;
	Clamps for securing the examined documents;
(T) 1 1	Carrying case for the device
Technical,	Document format supported: Up to 210 mm in height, unlimited width.
Quality, and	Operating system compatibility: Microsoft Windows 8, 10, 11 (32/64-bit).
Operational	Dimensions (L \times W \times H), maximum: 400 mm \times 300 mm \times 450 mm.
Characteristics	Weight, maximum: 12 kg.
	Power supply voltage: $220V \pm 2V$.
	Parameters of the Built-In Colour Camera:
	Magnification:
	Optical: > ×15
	Digital: > ×60 (for a 24-inch monitor)
	Field of view: $> 200 \times 110 \text{ mm}$
	Field of view. > 200 × 110 mm
	Video output parameters:
	Maximum resolution: 1920 × 1080 pixels (Full HD)
	Communication interface: USB 3.0
	Light Sources: All light sources are LED-based.
	Types of Light in Laboratory Mode WHITE light:
	From above (top illumination);
	1 rom above (top mammanon),

External oblique illumination;

Coaxial illumination;

Floor-mounted illumination with adjustable intensity control.

ULTRAVIOLET (UV):

From above – 254 nm, 313 nm, 365 nm, 400 nm;

From below -365 nm.

INFRARED (IR):

From above – 700 nm, 870 nm, 950 nm;

Two oblique sources – 870 nm;

From below – adjustable intensity illumination.

HIGH-INTENSITY LIGHT:

450 nm:

470 nm;

505 nm:

530 nm:

590 nm.

Light Filters:

Stationary filter;

Automatic filter setting;

Ultraviolet range: 400–1100 nm; Infrared range: 600–700 nm.

Document Reading Capabilities:

Document reading standards: ICAO 9303, ISO 7501;

Reading and recognition speed: not more than 5 seconds per document.

Parameters of the Built-In Contactless Electronic Chip (RFID) Reader:

Data exchange rates: 106, 212, 424, 848 Kbaud.

Public Key Infrastructure (PKI): version 1.1.

Supported standards: ISO 14443 Type A and Type B for RFID microchips.

ICAO Logical Data Structure (LDS): version 1.7 compliant.

RFID chip detection and reading initiated automatically after Machine

Readable Zone (MRZ) scanning. Data exchange interface: USB 3.0.

Certification and Standards

- ISO 9001
- CE

Documentation - The operation manual and all accompanying forms shall be provided in Romanian, English, and Russian languages;

Warranty - The equipment shall be covered by a warranty period of at least 5 years, starting from the date of commissioning (beginning of operation).

All warranty service expenses shall be borne entirely by the supplier, including the costs related to the transportation of the equipment to and from the service center, if it is necessary to move the equipment from the place of operation for repair or maintenance purposes.