

Technical requirements for the Specialized equipment for personalizing polycarbonate cards

Equipment and accessories – non-refurbished, produced after 01.01.2023. All requirements are minimum and mandatory..	
Field of use: Personalization of polycarbonate cards, ID-1 format	
General technical requirements for the Specialized equipment for personalizing polycarbonate cards:	
<u>I. The main components of the specialized personalization equipment:</u>	
1.	A built-in computer with a hard disk, a licensed operating system on which the manufacturer's software for the personalizing system and integrated equipment will run.
1.1	Integrated digital control panel (touchscreen) min.7”(inch)
1.2	TCP/IP system connection via Ethernet, LAN (1Gbit)
1.3	Licensed operating system: min. Windows 10
1.4	External connectivity: min. HDMI, USB(optional)
1.5	The CPU, RAM, and Storage parameters of the computer must match the minimum cumulative operating requirements of the Windows operating system and the manufacturer's integrated software system, and should have sufficient redundancy.
2.	Card feeding module of the input unit: with capacity of minimum 100 to maximum 250 cards
3.	Module for the primary verification of the cards: <i>optical character (text and numerical data) verification and recognition, barcode(EAN, CODE39, PDF417) and QR-code verification and recognition, verification and preprint auto-correction and positioning</i>
4.	Contactless chip encoding module
5.	Basic technology unit laser engraving module with a rotary unit on the X /Y axes (MLI/CLI)
6.	The automated quality control module for the personalization: <i>optical character (text and numerical data) verification and recognition, barcode(EAN, CODE39, PDF417) and QR-code verification and recognition, personalization quality verification and recognition</i>
7.	Storage module for the personalized cards, and separate rejected card storage container
<u>II. Functional technical requirements of personalization equipment:</u>	
<ul style="list-style-type: none"> • Personalization of ID-1 polycarbonate cards: card dimensions: 85.60 mm x 53.98 mm; Thickness of 0.76 mm ± 0.08 mm, according to ISO/IEC 7810 	
<ul style="list-style-type: none"> • Markup of textual data (TTF fonts), vector, raster graphics (images, signatures), as well as one- and two-dimensional barcodes (including PDF417 and QR codes) 	
<ul style="list-style-type: none"> • Standard laser personalization features such as: transparent window, ghost image, tactile elements; advanced security features such as CLI / MLI 	

<ul style="list-style-type: none"> • Double-sided personalization of polycarbonate cards, ID-1 format
<ul style="list-style-type: none"> • Coding system for contactless microcircuits according to ISO 14443, ISO 18092 (NFC)
<ul style="list-style-type: none"> • Data transfer rate: up to 424 kbit/sec
<ul style="list-style-type: none"> • Production capacity: minimum 100 cards per hour.
<ul style="list-style-type: none"> • The data format regarding the personalization and reporting works will be in XML format (min. UTF-8(mandatory), Unicode(optional)).
<ul style="list-style-type: none"> • Power supply: 230VAC± 10%, protection min. 10A, frequency 50/60 Hz
<ul style="list-style-type: none"> • Noise level: maximum 70 dB(A)
<p><u>III. Technical requirements for the Laser system:</u></p>
<ul style="list-style-type: none"> • Fiber laser with a minimum power of 20W
<ul style="list-style-type: none"> • Impulse width: adjustable
<ul style="list-style-type: none"> • Resolution: minimum 600 dpi
<ul style="list-style-type: none"> • Cooling: air - air
<ul style="list-style-type: none"> • Lifetime: min. 60,000 hours of operation
<ul style="list-style-type: none"> • Compliance with environmental conditions: room temperature min. 15 °C to 30 °C; humidity: min. 40% to a maximum of 60%.
<p><u>IV. Included amenities:</u></p> <p><u>1. Mandatory - Table (work desk) support for each specialized equipment for personalizing polycarbonate cards, according to the manufacturer's recommendations including:</u></p> <ul style="list-style-type: none"> • Work desk with integrated slots for cable management, • Free access to the shelves (drawers) arranged laterally, • Integrated strip of multiple sockets (the number of sockets must correspond to the total number of equipment placed on the table + min. 1 spare) for power supply with power surge protection, • Mounted on castors with locking brakes. <p><u>2. Optional: Integrated indicator (traffic light) - 3 colors to display the operating status of the personalization equipment:</u></p> <ol style="list-style-type: none"> 1) Green - Correct operation; 2) Yellow – Waiting; 3) Red - Not working/fault/etc.. <p>Placement of the indicator - with mounting on the personalization equipment.</p>
<p><u>V. Commissioning services and support:</u></p>

Support services at the Beneficiary's premises and/or remotely (as applicable) for the adjustment and integration of the integrated operating system during the period of equipment preparation for commissioning according to the Beneficiary's requirements, including:

- adaptation support with the national document production system at the Buyer's headquarters and remotely (if applicable) at the equipment commissioning stage;
- supply a spare parts kit, including tools and spare parts, to enable the Buyer's technical team to perform level 1 and 2 interventions for replacing any defective items that could disrupt the equipment's operation.
- training on the operation of new equipment and interventions for the primary remediation of level 1 and level 2 technical deficiencies, as well as the replacement of spare parts and software settings by the technical specialists of the Buyer.
- providing accompanying documentation:
 - The technical passport, including the manual(s) for the use and maintenance of the equipment in English;
 - Technical documentation related to the software product used, including equipment interfaces with examples of integration into the personalization system;
- configuration of sample document models and personalization on polycarbonate cards based on data provided by the Buyer (personalized document model on polycarbonate card for each type of document).

VI. Warranty

Warranty: min. 36 months (after delivery, commissioning and signing of the act of receiving and handing over the goods).

All costs of resolving warranty cases are borne by the manufacturer.

For the resolution of warranty cases as well as in the case of receiving technical assistance requests, the following reaction times will be observed:

- *Telephone response time – up to 2 business hours;*

Reaction time for diagnosing the equipment and determining the cause of the malfunction, including remotely (if applicable) - up to 8 working hours;

- *Reaction time for restoring the functionality of the equipment including remotely (if applicable) with the use of spare parts available in stock - up to 5 working days;*

- *Reaction time for restoring the functionality of the equipment with the use of spare parts not available in stock - up to 15 working days;*

Working hours - from 8.00 a.m. to 5.00 p.m., according to the time zone of the Republic of Moldova.

Working days - according to the calendar of the Republic of Moldova.

The supplier will present a statement that the equipment can be maintained and repaired for a period of at least 10 years with the assurance of the availability of parts during this period.