

## Document reader Regula model 7303



- Duplex scanning of ID-1 size documents: identity cards, driving licences, payment cards, social security cards and other documents.
- Automatic reading and authenticity verification of questioned documents.
- MSR (Magnetic Stripe Reader).
- Recognition of text data, reading of barcodes and RFID chips.

A small-sized motorized reader for desktop use. Hard plastic body (IP30). The device is connected to a PC via a USB cable. Reliable, convenient and easy-to-use.

The device allows scanning both front and back sides of documents by one operation and capturing images in white and infrared lights. It has a module for reading magnetic stripes. The reader can be optionally equipped with a module for reading RFID chips. The device is supplied with software development kit (SDK) for easy integration into existing end-user systems.

### **Technical specifications**

- Light sources:
  - white
  - infrared, nm — 870
- Scanning area, mm — 70×86
- Sensor:
  - type — CIS
  - colour depth — RGB
  - imaging, bit — 24
  - resolution, dpi — 300/600
- The number of magnetic tracks of magnetic stripe reader, not more than —3
- Overall dimensions (DxWxH),mm — 208×111×82
- Weight, not more than, kg — 0,72
- External power supply:
  - voltage, V — 12
  - nominal current, A, not less than — 1

### **Reader of radio frequency identification devices (RFID)**

- Supported standards — ISO 14443: RFID tags of type A and type B
- Data exchange rate, Kbaud — 106, 212, 424, 848
- Reading an RFID tag regardless of its position in the document
- Anti-collision: reading an RFID tag according to the MRZ

## Functionality

<b>Document image capture and processing</b>	
Document formats	<ul style="list-style-type: none"> <li>• ID-1 size (identity card)</li> <li>• other document formats up to 70×86 mm</li> </ul>
Scanning process	<ul style="list-style-type: none"> <li>• document sensor</li> <li>• automatic scanning after document detection</li> <li>• search and cropping of a document image from a received image</li> </ul>
<b>Machine readable zone (MRZ)</b>	
Supported MRZ formats	<ul style="list-style-type: none"> <li>• in conformity with ICAO 9303:</li> <li>• 30×3</li> <li>• support of special MRZ data structure for documents of certain countries</li> </ul>
Features	<ul style="list-style-type: none"> <li>• search for the MRZ along the whole document image</li> <li>• MRZ recognition in infrared and white light</li> <li>• control of check digits and data structure in conformity with the requirements of ICAO 9303 and BSI TR-03105 Part 5.1</li> </ul>
<b>Barcodes</b>	
Supported formats	<ul style="list-style-type: none"> <li>• 1D: Codabar, Code39 (+extended), Code93, Code128, EAN-8, EAN-13, IATA 2 of 5 (Airline), Interleaved 2 of 5 (ITF), Matrix 2 of 5, STF (Industrial), UPC-A, UPC-E</li> <li>• 2D: PDF417, Aztec Code, QR Code</li> </ul>
<b>Automatic document type recognition</b>	
Order of document type recognition	Country→Type→Series
Features	<ul style="list-style-type: none"> <li>• receiving a document sample from the SDK database containing the following information: <ul style="list-style-type: none"> <li>- text and graphic fields position,</li> <li>- availability of barcodes and security features</li> <li>- authenticity verification and its parameters</li> <li>- RFID-chip availability</li> <li>- a reference image from Information Reference Systems <b>“Passport”, “Autodocs”, “Frontline Documents System”</b></li> </ul> </li> <li>• processing of the received document images in compliance with the sample, including document image rotation by the angle given in the sample.</li> </ul>
<b>Graphic fields processing</b>	
Types of graphic fields	<ul style="list-style-type: none"> <li>• portrait of the document holder</li> <li>• signature</li> <li>• barcode</li> <li>• fingerprint, etc.</li> </ul>
Features	<ul style="list-style-type: none"> <li>• cropping and displaying graphic fields as separate images in compliance with the sample of the corresponding document</li> <li>• automatic searching of face on the document image and cropping the document holder portrait if the document type is not recognized</li> <li>• document image rotation according to the document holder portrait position</li> </ul>

<b>OCR of the visual zone</b>	
Recognition of character sets	<ul style="list-style-type: none"> <li>• Central European and Eastern European Latin (1250)</li> <li>• Cyrillic (1251)</li> <li>• Western European Latin (1252)</li> <li>• Greek (1253)</li> <li>• Turkish (1254)</li> <li>• Baltic (1257)</li> <li>• other fonts of any size</li> </ul>
Features	<ul style="list-style-type: none"> <li>• dictionary support (name, surname, address, country, etc.)</li> <li>• automatic text division into separate fields (e.g. dividing the address into postal code, country, state, etc).</li> <li>• recognition of dates with complex formats</li> <li>• recognition of characters from different character sets in one line</li> </ul>
<b>RFID SDK</b>	
Supported RFID-chip standards	<ul style="list-style-type: none"> <li>• ISO/IEC 14443-2 (тип А и В)</li> <li>• ISO/IEC 14443-3 (MIFARE® Classic Protocol)</li> <li>• ISO/IEC 14443-4</li> </ul>
Data access modes	<ul style="list-style-type: none"> <li>• Direct</li> <li>• BAC</li> <li>• EAC</li> <li>• PACE</li> </ul>
Authentication	<ul style="list-style-type: none"> <li>• active (AA)</li> <li>• passive (PA)</li> <li>• chip (CA v1, CA v2)</li> <li>• terminal (TA v1, TA v2)</li> </ul>
Supported applications	<ul style="list-style-type: none"> <li>• ePassport (DG1–DG16)</li> <li>• eSign</li> </ul>
Certificate management	<ul style="list-style-type: none"> <li>• local storage</li> <li>• receiving certificates online through the program interface</li> <li>• Master List, CRL support</li> </ul>
Features	<ul style="list-style-type: none"> <li>• reading RFID chips with extended length support</li> <li>• reading RFID chips in compliance with ICAO LDS 1.7, PKI 1.1 data formats</li> </ul>
<b>Analysis and comparison of text data</b>	
Document areas for cross-checking of the readout data	<ul style="list-style-type: none"> <li>• MRZ</li> <li>• VIZ</li> <li>• RFID-chip</li> <li>• barcode</li> <li>• magnetic stripe</li> </ul>
Verification	<ul style="list-style-type: none"> <li>• validity of any dates</li> <li>• authenticity of names and surnames according to lists of wordstops</li> <li>• zero numbers of sample documents</li> </ul>
Adjustment of formats and measuring units to those used in the user OC	<ul style="list-style-type: none"> <li>• date</li> <li>• weight</li> <li>• height, etc.</li> </ul>
Features	<ul style="list-style-type: none"> <li>• complete or partial comparison of fields</li> <li>• integration of data received from several document pages</li> <li>• calculated field support (age, etc.)</li> <li>• transliteration of Latin characters in compliance with ICAO 9303 standards for comparison with the MRZ</li> </ul>

<b>Authenticity verification</b>	
Operation available for any document	<ul style="list-style-type: none"> <li>checking the MRZ print contrast in compliance with ICAO 9303 (IR B900 Ink)</li> </ul>
Operations available after document type recognition	<ul style="list-style-type: none"> <li>checking image patterns in white and IR light</li> <li>checking IR Visibility of:               <ul style="list-style-type: none"> <li>elements of the form,</li> <li>text data,</li> <li>the photograph (main and additional)</li> </ul> </li> <li>visualization of IPI (Invisible Personal Information)</li> <li>checking the barcode format</li> </ul>
Features	<ul style="list-style-type: none"> <li>Checking operations are adjusted to documents with different degrees of wear and tear.</li> <li>The choice of checking operations depends on security features available in a questioned document.</li> </ul>
<b>Additional SDK functions</b>	
Image formats	<ul style="list-style-type: none"> <li>.BMP</li> <li>.JPEG</li> <li>.JPEG2000</li> <li>.PNG</li> <li>.TIFF</li> <li>other image formats are possible on request</li> </ul>
Interoperability	<ul style="list-style-type: none"> <li>comparison modules:               <ul style="list-style-type: none"> <li>fingerprint images from RFID chip and external fingerprint scanner</li> <li>face images from passport data page, RFID chip and live</li> </ul> </li> <li>Information Reference Systems <b>“Passport”, “Autodocs”, “Frontline DocumentsSystem”</b></li> </ul>
Software update (at least twice a year)	<ul style="list-style-type: none"> <li>adding new functions and authenticity verification algorithms</li> <li>adding new document templates into SDK database</li> </ul>
OS compatibility	<ul style="list-style-type: none"> <li>Microsoft Windows XP (SP3), Windows 7 (x86, x64), Windows 8</li> </ul>
Drivers	<ul style="list-style-type: none"> <li>Microsoft certified</li> </ul>
Features	<ul style="list-style-type: none"> <li>multilingual interface</li> </ul>



## Duplex scanning of documents



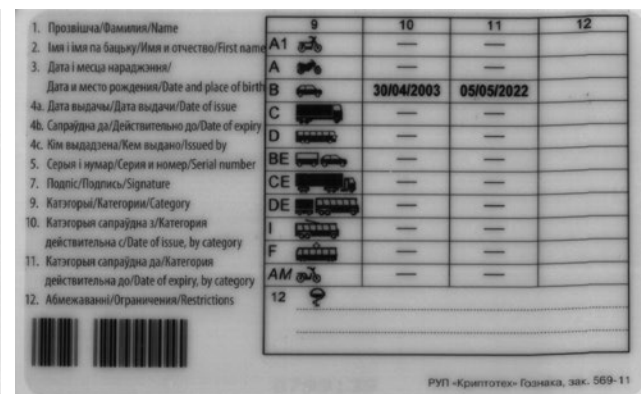
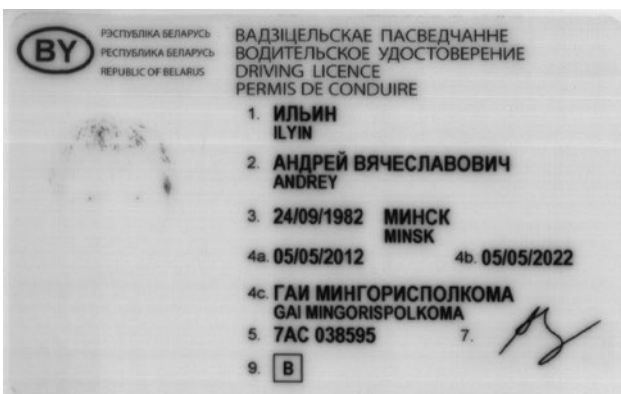
The front and back of an identity card in white light



The front and back of an identity card in infrared light



The front and back of a driving licence in white light



The front and back of a driving licence in infrared light





