

Morpho Identix

Full ID document authentication solution



Public Security



Citizen Identity



Financial
Institutions



Mobile
Operators

Checking the authenticity of a document is always a challenge for inspection officers and security personnel. With Morpho Identix, document reading is faster, easier and more effective in detecting document forgery. This advanced solution verifies the authenticity of a comprehensive range of travel and identity documents from around the World, including passports, national ID cards, visas, immigration cards and drivers' licenses.



Reads and processes more than 4000 currently used international travel and identity documents

Checks security features in different light sources such as visible, UV and IR

Automatically informs operators in case of alert, no training required

Numerous data sorting, archiving and report run options to meet country privacy and data protection laws

A unique combination of best-of-breed technologies

Morpho Identix combines IDEMIA's new generation, cross-platform, intelligent ID document authentication software with DESKO's PENTA multifunctional ID document scanner^(*). This cutting-edge document authentication solution operates with trained intelligence. It analyzes document images and applies authentication rules based on the type, version, country of origin of the document, so as to seek and check the covert and overt security features, infrared and ultraviolet details expected from a genuine document. Data extraction and cross-checks are included in the process, all in a few seconds.

^(*) Morpho Identix solution works also with IDEMIA's B5000 document reader



Typical use cases

AIRPORTS, AIRLINES, CRUISE LINES

- Passenger travel document pre-boarding checks
- Passenger check-in
- Staff background checks before recruitment.

GOVERNMENTAL INSTITUTIONS

Existing ID document authentication before renewal or before issuance of another ID document type

GAMING

- ID checks against lists of gambling addicts, cheats and known criminals
- ID checks for gaming/wining a certain sum of money
- ID registration for membership

BORDER CONTROL

Travel document (passport, ID card, visa) authentication for border crossing

FINANCIAL INSTITUTIONS, TELCO

- AML (Anti-Money Laundering) / KYC (Know Your Customer) procedures when on boarding customers
- Data extraction for data mining or to populate automatically the institution's customer database

HOTELS, CAR RENTAL

- Hotels: ID document reading and data extraction for foreign visitors, for local police information
- Car rental: drivers' licenses (passports) and credit cards cross-checking



Morpho Identix document authentication in a nutshell

1 Document identification
Country of origin, type, version

2 Verification of the electronic chip
RFID & NFC reading: ISO 14443 (A/B), ISO 7816 (incl. US passport), ICAO 9303

3 Data integrity check
MRZ vs. Data page vs. Chip
OCR recognition: read rate >99% of data from machine readable passports and identification cards according to ISO/IEC 7501-1 and ICAO 9303

4 Photo integrity check
Data page vs. Chip

5 Verification of security features
Visible, infrared, ultraviolet, etc.

6 Display of extracted data/ verification results to the viewer

Complementary steps

Use of extracted data: auto-population of fields, data mining, audit trail creation, reporting

Facial recognition: bearer's portrait vs. image in the chip (1:1) or bearer's identity vs. watch lists (1:N), using MorphoKit multi-biometric SDK

Key features

IDENTIX SOFTWARE

A proven solution

- Based on 15 years of experience in ID document authentication
- Continuously enhanced to fulfill the needs of a large variety of public and private institutions around the World

The most relevant ID document database

- More than 4000 currently used documents to date⁽¹⁾:
 - ICAO travel documents, passports, national identity cards, visas
 - Non-ICAO travel documents, including many of the World's identity cards, residents permits, certain citizen's identity documents and permits, a comprehensive range of drivers' licenses from around the World and all the northern American drivers' licenses
- Constantly maintained to add new documents issued by governments worldwide
- Can be enriched with a range of specific documents as required by certain projects

Fast and accurate – MRZ reading in 200ms

- Chip reading: 2.5 to 6s⁽²⁾

Full scope of forensic document checks

- Using 500 dpi resolution and 3 light bands: visible coaxial, infrared and ultraviolet
- Examining and authenticating expected security features from genuine documents, including checksum, B900 ink, expiration date, visible pattern, infrared brightness/pattern, and ultraviolet brightness/pattern
- VIZ-OCR option, for full data extraction

⁽¹⁾ No double counting (e.g. two revisions of passport from a country are treated as one)

⁽²⁾ For BAC chip type (may increase up to 15 to 18s for PACE and certain complex chip types)



VISIBLE PATTERN



IR PATTERN



UV PATTERN

DESKO'S PENTA SCANNER®

Full document reading capability

- OCR Recognition (MRZ)
- Image capture: visible, infrared and ultraviolet
- RFID/NFC (e-Passports)

Document movement detection

Ensures that only non-blurred scans are processed

Insensitivity to ambient light

Usable without a light shield

User feedback

LED (visual) and buzzer (audio)

Fast communication

High speed USB 2.0 connection between scanner and PC

Rugged design

Solid box, no moving parts, extra toughened glass, PERLUCOR® coated scan window

Small footprint

Available as an OEM unit that can be integrated into a kiosk environment

Options

- Barcode reading on paper and smartphones^(*)
- Magnetic stripe reading^(*)
- 4,3" color touchscreen^(*)
- Connections: RS232, LAN/WLAN/3G, mini PC (read only)
- 2nd USB 2.0 port for a fingerprint reader and other peripherals
- Battery pack (up to 16 hours operation)
- Customized front sticker and housing color

^(*) Options not supported by Identix software at launch



OEM VERSION



STANDARD VERSION



WITH COLOR DISPLAY

Technical specifications

IDENTIX SOFTWARE

- **Operating systems:** Windows 7 and 10
- **Minimal PC configuration:**
 - Processor: Intel Core 2 Duo 2.6 GHz or better
 - RAM: 512 MB minimum
 - Free disk space: 20 GB
 - Video display: 1024 x 768 resolution, 65536 colors or better
 - A USB 2.0 free port (high speed, 480 Mbps)
- **Graphical User Interface or integration via SDK**

DESKO'S PENTA SCANNER®

- **Image Resolution:** 150 up to 500 dpi
- **Light Bands:** Visible (5600K), Infrared (850nm) and Ultraviolet (365nm)
- **Interface to the PC:** USB 2.0 high speed
- **Size (LxWxH):** 219,9 x 150,1 x 144,7 mm (8.7" x 5.9" x 5.7")
- **Power Voltage:** 5V DC +/- 5%, different country versions available
- **Supply Current:** 2,5A max.
- **Storage Temperature:** -10°C to +60°C
- **Operating Temperature:** 0°C to +50°C
- **Humidity:** 20% to 80% (RH non condensing)
- **Reliability:** MTBF of 180 000 hours
- **Certifications:** CE, FCC, WEEE, RoHS, BSI