

# The compact document reader with high-end OCR technology

## PRMIRC1 e-passport reader (OEM version)

### PRMIRC1: compact all-in-one solution for document reading and verifying

PRMIRC1 units authenticate quickly and accurately the electronic and printed data in all ICAO standard travel documents.

The built-in digital signal processor (DSP) significantly speeds up the image-processing and efficiently reduces the reading time.

PRMIRC1 readers offer one-step reading printed and electronic data. Electronic data from the chip is read regardless the position of the chip within the document.

PRMIRC1 document readers read printed and electronic data in one single step. Electronic data from the chip is read regardless of the position of the chip in the e-document. With the use of the software package (SDK) PRMIRC1 can be integrated easily into complete solutions.

#### Main advantages of PRMIRC1 e-passport reader

- Reading e-passports, visas and other documents
- Built-in DSP: outstanding reading performance
- Fast image processing and RFID reading
- Reading contact smart cards
- Exceptionally high rate of OCR reading
- High resolution images in IR, UV and visible light
- Security checking, authentication
- Can be linked to any database, ready for PKI integration
- Hands-free operation
- Compact design
- Automatic document detection
- No moving parts, maintenance-free operation



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# Technical specifications

## of PRMIRC1 e-passport reader (OEM version)

### Available options for PRMIRC1

- Smart card module (type S)
- 700PPI photo camera (type P)
- Extended document window 130x100mm (type E)
- Flip-top cover (type F)

### Technical Specifications

#### Illuminations

- Visible
- IR
- UV

#### Optical Specifications

- Image sensor: 3 Megapixel
- Image resolution: 400 dpi
- Face image resolution: 700 dpi (available in type P devices)
- Image colour depth: 24 bits/pixels RGB, 8 bits/pixels (Infra image)

#### Hardware Units

- Internal memory: storing factory calibration
- Firmware upgrade: automatic
- Built-in DSP data processing unit

#### Mechanical Data

- Size with cover: 213x173x179 mm (8.39" x 6.81" x 7.08")
- Window size: 130x98 mm (5.12" x 3.86")
- Case: ABS plastic on metal base
- Window glass: 4 mm tempered glass
- Operating temperature: +5°C to +45°C (41°F to 113°F)
- Operating humidity: 0-95% (non-condensing)
- Weight: 2.0-2.4 kg (4.41-5.29lb) depending on configuration
- No moving parts
- Kensington® security slot

#### Other Specifications

- Compliances: CE, FCC, RoHS, IEC 62471
- Interface: USB 2.0
- Number of status LEDs: 3 programmable
- Power: external power supply included (100-240V AC, 50/60Hz)

### RFID Module

- Single-step reading
- DUAL RFID antenna
- RFID chip is detected in any position within the passport
- Support all ISO 14443 A/B chip types
- Active/passive authentication, BAC, EAC
- RFID data is read with the highest possible speed supported by the chip
- Airspeed limit: max 848Kbps (if supported by the chip)

### Smart Card Module (optional)

- Support ISO 7816 & EMV2 2000 Level 1 standards

### Advanced Document Authentication Module (ADAM)

- MRZ checksum validation
- MRZ comparing to VIZ (ask for details)
- Printed MRZ comparing to MRZ stored in RFID chip
- Printed face photo comparing to photo stored in RFID chip -DG2-
- Expiry date check
- B900 ink check
- UV dull paper check (in case of devices with UV light)
- Automatic pattern matching under Normal, UV, IR light (optional, ask for details)

#### Authentication methods with Photo Camera (type P devices)

- Photo substitution check (manual)
- JURA IPI decoding (optional, ask for details)
- GSSC VIPhoto™ decoding (optional, ask for details)
- Background printing check (manual)
- Microprinting check (manual)

### Software Development Kit (SDK)

#### Supported OS

- Windows® 7 (32/64bit), Vista (32/64bit), XP (32/64bit), 2003 (32/64bit)
- Linux® (ask for details)

#### Programming languages

- C/ C++, C#, Visual Basic 6.0, Delphi, VB.NET, Java

#### Processing time (depending on PC configuration)

- Image capture and MRZ Reading < 0.5sec

#### MRZ OCR reading

- ICAO 9303

#### VIZ OCR reading

- Zones defineable by user

#### Farsi OCR reading

- Optional (only available for this model, ask for details)

#### 2D Barcode reading

- PDF 417, Data Matrix, QR Code, Aztec Code

#### 1D Barcode reading

- EAN8, EAN13, Code39, Code128. Interleaved 2 of 5

#### Image format

- BMP, JPG, JPG2000, PNG

#### Extended High Colour Fidelity (XCF)

- Automatic colour calibration
- Outstanding deltaE value (ref. Q-60R2 Kodak Target)

*Technical specifications are subject to change without prior notice*

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