

Intelligent Document Reader IDR500



Intelligent Document Reader IDR500 is a compact, full-featured universal device for multi-type document identification. It features an optical imaging system capable of capturing color, infrared, and ultraviolet images of documents; integrates an RFID module for reading various document chips, with an optional second-generation Chinese resident ID card reader.

Suitable for information collection, registration, inspection, and entry/exit personnel management in high-traffic venues such as hotels, government service windows, foreign-related institutions, airports, and high-speed railway stations.

Key Features

- Equipped with Optical Character Recognition (OCR) technology and Radio Frequency Identification (RFID) module for machine-readable multi-document information.
- Image resolution up to 500 DPI.
- Multi-spectrum imaging: visible light for color archiving, infrared light for black-and-white recognition, ultraviolet light for color anti-counterfeiting.
- Eliminates glare caused by document anti-counterfeiting films and laminates.
- Automatic portrait cropping with customizable background replacement.
- Automatic document detection and recognition for user-friendly operation, suitable for self-service applications.
- Automatic detection of document orientation (front/back) with rotation correction.
- LED status indicators for real-time device status display.
- Compact and square design, suitable for both kiosk integration and desktop placement.
- Expandable for custom document recognition.

Supported Documents

- Domestic Chinese Resident ID Cards: Resident ID Card, Residence Permit, Temporary ID Card, Electronic ID Card, Driver's License, Vehicle License.
- Chinese-Issued Documents: Chinese Passport, Exit-Entry Permit for Taiwan, Hong Kong and Macao, Resident Permit for Hong Kong, Macao and Taiwan Residents.
- Hong Kong, Macao and Taiwan Resident Documents: Hong Kong ID Card, Macao ID Card, Home Visit Permit, Taiwan Compatriot Permit.
- Passports: Machine-readable electronic passports from all countries worldwide following ICAO DOC 9303 international standards.

Application Scenarios

- Hotels: Guest check-in information registration
- Exit-Entry Administration: Entry-exit personnel information management
- Bank Counters: Personnel real-name system management
- Airports & High-Speed Rail: Channel personnel access information management
- Visitor Management: Personnel access document registration
- Judicial Notarization: Personnel identity verification

Technical Specifications

Item	Description
Image Capture	Capture area: 130 x 92 mm 24-bit full color, black & white, UV color images Eliminates glare from document films and laminates Resolution: 500 DPI $\pm$ 5 DPI, no obvious image distortion, distortion rate $\leq$ 1%
Light Source	Visible light: 400-700nm, Near-infrared: 850nm, Ultraviolet: 365nm
OCR Recognition	Numbers, letters, characters (Simplified Chinese, Traditional Chinese, English), OCR success rate $\geq$ 99.9%
RFID Recognition	ISO14443 Type A/Type B smart cards (13.56MHz) Maximum data rate up to 848 Kbps Supports all documents following ICAO 9303 standard Part 1-4 specifications
Second-Gen ID Card (Optional)	Supports second-generation Chinese resident ID card RF recognition, card reading time $\leq$ 1 second
Barcode Recognition	1D Barcodes: Code128, Code39, etc. 2D Barcodes: PDF417, QR, Data Matrix, etc.
Image Processing & Storage	Supports automatic document image correction, cropping and saving Supports JPG, BMP, PNG and other image formats Supports chip original LDS format and parsed format storage
Communication Interface	Two USB 2.0 ports, supports USB interface expansion
Document Security	Supports electronic passport BAC, PACE, EAC access control methods Supports CAN method for electronic passport access Supports AA, PA, CA and other authentication mechanisms
Trigger Mode	Supports manual and automatic detection trigger
Indicator Lights	Red, Blue, Green three-color indicators for error, power, and running status
Button	Independent power switch
Power Supply	External standard power adapter, power consumption $\leq$ 48W Input: AC 100-240V, 50/60Hz, 0.8A Output: 12V, 4A DC Jack 5.5*2.1mm Power misinsertion protection, CCC certified

Physical Dimensions	L 193 x W 164 x H 109 mm (excluding top cover)
Weight	≤ 2.87 (lbs)
Operating Temperature	-10°C ±3°C to +50°C ±3°C
Operating Humidity	20 ~ 95% RH (relative humidity, no condensation on surface)
Storage Humidity	10 ~ 95% RH (relative humidity, no condensation on surface)
Storage Temperature	Minimum -20°C, Maximum +50°C
Protection Rating	IP51
Minimum PC Configuration	1.7GHz Pentium 4, 50GB hard disk space, 1GB RAM Windows 7 or above, Android 5.0 or above
Operating Environment	Humidity: 20%-95%, no condensation Temperature: Operating -10 to 55°C, Storage -20 to 60°C
Software Development Kit	C++, C#, Java, Android
Operating System	Windows, Android, Linux (supports domestic Kylin OS)
Hardware Support	x86, ARM, Loongson 64-bit architecture
Warranty & Service	1-year warranty, lifetime maintenance

FCC Warning:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The device has been evaluated to meet general RF exposure requirement.